

ADEQ

A R K A N S A S
Department of Environmental Quality

SEP 20 2016

Curtis Warner, Director - Compliance & Support
Arkansas Electric Cooperative Corporation - Thomas B. Fitzhugh Generating Station
P.O. Box 194208
Little Rock, AR 72219

Dear Mr. Warner:

The enclosed Permit No. 1165-AOP-R7 is your authority to construct, operate, and maintain the equipment and/or control apparatus as set forth in your application initially received on 6/7/2016.

After considering the facts and requirements of A.C.A. §8-4-101 et seq. as referenced by §8-4-304, and implementing regulations, I have determined that Permit No. 1165-AOP-R7 for the construction and operation of equipment at Arkansas Electric Cooperative Corporation - Thomas B. Fitzhugh Generating Station shall be issued and effective on the date specified in the permit, unless a Commission review has been properly requested under Arkansas Department of Pollution Control & Ecology Commission's Administrative Procedures, Regulation 8, within thirty (30) days after service of this decision.

The applicant or permittee and any other person submitting public comments on the record may request an adjudicatory hearing and Commission review of the final permitting decisions as provided under Chapter Six of Regulation No. 8, Administrative Procedures, Arkansas Pollution Control and Ecology Commission. Such a request shall be in the form and manner required by Regulation 8.603, including filing a written Request for Hearing with the APC&E Commission Secretary at 101 E. Capitol Ave., Suite 205, Little Rock, Arkansas 72201. If you have any questions about filing the request, please call the Commission at 501-682-7890.

Sincerely,



Stuart Spencer
Associate Director, Office of Air Quality

Enclosure: Final Permit

RESPONSE TO COMMENTS

**ARKANSAS ELECTRIC COOPERATIVE CORPORATION - THOMAS B. FITZHUGH
GENERATING STATION
PERMIT #1165-AOP-R7
AFIN: 24-00012**

On July 15, 2016, the Director of the Arkansas Department of Environmental Quality gave notice of a draft permitting decision for the above referenced facility. During the comment period, written comments on the draft permitting decision were submitted by Stephen Cain, on behalf of the facility. The Department's response to these issues follows.

Note: The following page numbers and condition numbers refer to the draft permit. These references may have changed in the final permit based on changes made during the comment period.

Comment #1:

AECC requests that the requirement to submit records in the semi-annual monitoring reports for the gasoline throughput of the Gasoline Tank (SN-10) be removed from the permit. Specific Condition 38 states that the twelve-month rolling data for gasoline throughput in SN-10 "shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7." (General Provision #7 requires submittal of semi-annual monitoring reports.)

AECC agrees that the records should be maintained on-site and made available to Department personnel upon request; however, AECC believes that because this information will be made available to Department personnel upon request that it seems duplicative and unnecessary to require that this information be submitted twice per year to ADEQ given that this is such a small source – a 140-gallon gasoline tank.

For the reasons listed above, AECC requests that the requirement to submit these records in the semi-annual monitoring reports be removed from Specific Condition 38. (Specifically, please remove "...and submitted in accordance with General Provision #7" from Specific Condition 38.)

Response to Comment #1:

This request is not accepted. The requirements of Reg.26.701(C)(3)(a) requires the submittal of all reports at least every six months.

Comment #2:

AECC requests that the requirement to provide records for the Gasoline Tank (SN-10) within 24 hours be lengthened to 72 hours.

Specific Condition 40 requires that records for SN-10 be available within 24 hours of Department request. While AECC can typically supply this information within a couple of hours of a request, there are occasions such as weekends, holidays, employee vacations, etc. that may restrict AECC's ability to provide this information within 24 hours. The employees at this facility are responsible for the Fitzhugh plant as well as two hydroelectric plants located approximately 40 and 70 miles from the Fitzhugh plant. While the Fitzhugh plant is manned 24-

hours per day by plant operators, administrative staff that would gather and provide any records to ADEQ generally do not work on weekends and most holidays.

For the reasons listed above, AECC requests that the time restriction for providing records for SN-10 be increased from 24 hours to 72 hours.

Response to Comment #2:

The request is not accepted. The requirements of 40 C.F.R. § 63.1116(b) requires that records be available within 24 hours of the request by the Administrator.

Comment #3:

AECC requests that the requirement to submit records in the semi-annual monitoring reports for the Stand-By Fire Pump Engine (SN-11) be removed from the permit.

Specific Condition 46 states that the twelve-month rolling data for SN-11 “shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7.” (General Provision #7 requires submittal of semi-annual monitoring reports.)

AECC agrees that the records should be maintained on-site and made available to Department personnel upon request; however, AECC believes that because this information will be made available to Department personnel upon request that it seems duplicative and unnecessary to require that this information be submitted twice per year to ADEQ given that this is such a small source that does not achieve much operating time.

For the reasons listed above, AECC requests that the requirement to submit these records in the semi-annual monitoring reports be removed from Specific Condition 46. (Specifically, please remove “...and submitted in accordance with General Provision #7” from Specific Condition 46.)

Response to Comment #3:

This request is not accepted. The requirements of Reg.26.701(C)(3)(a) requires the submittal of all reports at least every six months.

Comment #4:

Statement of Basis, Item 6: SN-11 is titled “Emergency” Fire Pump Engine. Please change the title to Stand-By Fire Pump Engine.

Response to Comment #4:

The request is accepted and the change is made.

Comment #5:

The Stand-by Diesel Generator (SN-08) is not subject to testing by the permittee.

Statement of Basis, Item 13, last row: This states that SN-08 is subject to testing. The test method listed is 40 CFR Part 1042. 40 CFR Part 1042 is a regulation listing requirements for engine manufacturers – not engine owners and operators.

SN-08 is a stationary compression ignition reciprocating internal combustion engine (RICE) that has a displacement of less than 30 liters per cylinder. The engine is located at an area source of HAP emissions, and since was manufactured after April 1, 2006 it is subject to NSPS Subpart III.

Under NSPS Subpart IIII, engines are only subject to performance testing by the owner/operator if the engine has a displacement of greater than or equal to 30 liters per cylinder. Since this engine has less than 30 liters per cylinder, compliance is demonstrated by: (1) purchasing a newer engine that has been certified by EPA; and (2) installing, configuring, operating, and maintaining the engine per the manufacturer's instructions.

SOB Item 13 references 40 CFR §60.4212 as justification for this requirement. However, §60.4212 refers to 40 CFR Parts §1039 and §1042. Both of these parts are requirements for engine manufacturers – not engine owners and operators.

A performance test was performed by the manufacturer, and the engine is EPA certified because the engine passed the performance test. The EPA certification certificate is attached for reference.

Please remove SN-08 from the table in SOB Item 13 because AECC is not required to do performance testing on this unit. The manufacturer performed the required testing and the engine passed and is EPA certified.

Response to Comment #5:

The request is accepted and the change is made.

ADEQ OPERATING AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation 26:

Permit No. : 1165-AOP-R7

IS ISSUED TO:

Arkansas Electric Cooperative Corporation - Thomas B. Fitzhugh
Generating Station
6006 Lock and Dam Road
Ozark, AR 72949
Franklin County
AFIN: 24-00012

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

July 30, 2013 AND July 29, 2018

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:



Stuart Spencer
Associate Director, Office of Air Quality

SEP 20 2016

Date

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List of Acronyms and Abbreviations

Ark. Code Ann.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
C.F.R.	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO _x	Nitrogen Oxide
PM	Particulate Matter
PM ₁₀	Particulate Matter Smaller Than Ten Microns
SNAP	Significant New Alternatives Program (SNAP)
SO ₂	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

SECTION I: FACILITY INFORMATION

PERMITTEE: Arkansas Electric Cooperative Corporation -
Thomas B. Fitzhugh Generating Station

AFIN: 24-00012

PERMIT NUMBER: 1165-AOP-R7

FACILITY ADDRESS: 6006 Lock and Dam Road
Ozark, AR 72949

MAILING ADDRESS: P.O. Box 194208
Little Rock, AR 72219

COUNTY: Franklin County

CONTACT NAME: Curtis Warner

CONTACT POSITION: Director - Compliance & Support

TELEPHONE NUMBER: (501) 570-2462

REVIEWING ENGINEER: Franck Houenou

UTM North South (Y): Zone 15: 3924757.43 m

UTM East West (X): Zone 15: 427059.88 m

SECTION II: INTRODUCTION

Summary of Permit Activity

Arkansas Electric Cooperative Corporation (AECC) operates a Westinghouse 501D5A combustion turbine at the existing Thomas B. Fitzhugh Generating Station located at 6006 Lock and Dam Road in Ozark, Arkansas 72949. With this minor modification, the facility requests to remove the Emergency Fire Pump Engine (SN-09) from the permit and replace it with a new Stand-By Fire Pump Engine (SN-11). The facility also requests to remove the acid and caustic tanks from the list of insignificant activities and add three additional tanks (300-gallon diesel tank, 525-gallon diesel tank, and 2,000-gallon diesel tank) to the list of insignificant activities. Total facility-wide permitted emissions will decrease by 0.1 tpy PM/PM₁₀, 0.1 tpy CO and 0.3 tpy VOC.

Process Description

This plant currently produces an electrical output of 170.6 MW/hr at a thermal efficiency of 42.0%. The generating unit at the plant is a Siemens Westinghouse 501D5A combustion turbine with one heat recovery steam generator (HRSG) with duct burners (SN-06). The combustion turbine is permitted to burn a lean mixture of compressed air and pipeline quality natural gas or No. 2 fuel oil. The duct burners burn only pipeline quality natural gas. The combustion turbine is equipped with dry-low NO_x burners. The combustion turbine also utilizes water injection when combusting fuel oil to reduce NO_x emissions.

SN-06 replaced the original boiler (SN-01) which was at the end of its useful life. SN-06 is now the steam source for the original steam turbine.

This arrangement is typically referred to as combine cycle “repowering”. The combustion turbine drives an electric generator along a common shaft. The high temperature exhaust from the combustion turbine is used to generate steam in the HRSG; the HRSG is the steam source for the original steam turbine.

The benefits of this arrangement are much higher thermal efficiency as well as significantly lower emissions per unit of electricity produced.

SN-06 has a diverter damper and bypass stack installed between the combustion turbine exhaust and the HRSG. The diverter damper allows AECC to start up the combustion turbine at a faster rate (which greatly reduced air emissions because the unit achieves optimum combustion in a relatively short amount of time). The damper modulates the exhaust out of the bypass stack and sends the exhaust to the HRSG to produce steam at a rate necessary to accommodate the steam turbine ramping requirements. It also allows the unit to run in simple-cycle mode if the HRSG or steam turbine is shut down for maintenance.

SN-06 has a supplemental duct burner system in the HRSG. During periods of peak electrical demand, the duct burners are used to supplement the amount of waste heat from the combustion turbine allowing the HRSG’s maximum steam production to match the existing steam turbine’s

maximum capability. The duct burner system is used only rarely when the demand for electricity is very high.

SN-06 is primarily used to generate electricity for intermediate and peak load conditions.

Other permitted equipment at the plant includes two fuel oil storage tanks (SN-04 and SN-05) and a helper cooling tower (SN-07). The cooling tower is used to reduce the temperature of the effluent before it is discharged to the Arkansas River.

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective March 14, 2016
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective March 14, 2016
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective March 14, 2016
The facility is considered a major stationary source under the Prevention of Significant Deterioration (PSD) regulations as found in 40 C.F.R. §52.21.
The combustion turbines are subject to 40 C.F.R. Part 60, Subpart GG - <i>Standards of Performance for Stationary Gas Turbines</i>
The duct burner is subject to regulation under 40 C.F.R. Part 60, Subpart Db- <i>Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units</i>
40 C.F.R. Part 60, Subpart IIII- <i>Standards of Performance for Stationary Compression Ignition Combustion Engine</i>
40 C.F.R. Part 63 Subpart ZZZZ- <i>NESHAP for Reciprocating Internal Combustion Engines</i>
40 C.F.R. Part 63 Subpart CCCCCC – <i>NESHAP for Gasoline Dispensing Facilities.</i>
The combustion turbine & duct burner (SN-06) is subject to 40 C.F.R. Part 75, <i>Continuous Emission Monitoring</i>

This facility is classified as a major source of greenhouse gas emissions.

Emission Summary

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	55.1	91.1
		PM ₁₀	55.1	91.1
		PM _{2.5}	See Note*	
		SO ₂	515.1	840.2
		VOC	12.4	27.1
		CO	306.7	499.9
		NO _x	278.8	448.4
HAPs		Formaldehyde**	1.1	3.1
		Total HAPs**	0.1	0.1
01	Main Boiler (680 MMBtu/hr)	Removed from Service		
02	Auxiliary Boiler (8.4 MMBtu/hr)	Removed from Service		
03	Fuel Oil Storage Tank #1	Converted to Water Storage Tank		
4	Fuel Oil Storage Tank #2	VOC	0.4	0.2
5	Fuel Oil Storage Tank #3	VOC	0.4	0.2
6	Westinghouse 501D5A Combustion Turbine & HRSG Duct Burners	PM	54.4	88.9
		PM ₁₀	54.4	88.9
		SO ₂	514.0	839.8
		VOC	11.2	26.4
		CO	305.8	499.6
		NO _x	273.6	447.0
		Formaldehyde	1.1	3.1
7	Cooling Tower	PM	0.5	2.0
		PM ₁₀	0.5	2.0
8	Stand-By Diesel Generator Engine	PM	0.1	0.1
		PM ₁₀	0.1	0.1

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		SO ₂	1.0	0.3
		VOC	0.2	0.1
		CO	0.6	0.2
		NO _x	4.1	1.1
		Total HAPs	0.004	0.001
9	Emergency Fire Pump Engine	Removed from Service		
10	Gasoline Tank (140 gal)	VOC	0.1	0.1
11	Stand-By Fire Pump Engine	PM	0.1	0.1
		PM ₁₀	0.1	0.1
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.3	0.1
		NO _x	1.1	0.3
		Total HAPs	0.1	0.1

*PM_{2.5} limits are source specific, if required. Not all sources have PM_{2.5} limits.

**HAPs not included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.

SECTION III: PERMIT HISTORY

Permit #1165-A was issued on June 10, 1991. It allowed this facility to restart operations after six years of down time. It allowed emissions of 9.0 tpy PM₁₀, 4.0 tpy SO₂, 1578 tpy NO_x, 114 tpy CO, and 4.0 tpy VOC.

Permit #1165-AR-1 was issued on September 22, 1992. This permit updated emissions from the facility to reflect testing results. The facility agreed to limit the fuel firing rate to 65% of the maximum in order to avoid PSD. This permit also included emissions from the combustion of #6 fuel oil in times of natural gas curtailment and added the fuel oil heater and 100 HP boiler. Emissions totals were 5.7 tpy PM₁₀, 2.8 tpy SO₂, 1484.1 tpy NO_x, 74.0 tpy CO, and 2.8 tpy VOC.

Permit #1165-AR-2 was issued on May 1, 1994. This modification once again changed the emission rates to reflect testing results and added the fuel oil storage tanks to the permit. Emission rates were 340.1 tpy PM/PM₁₀, 2056.75 tpy SO₂, 13.17 tpy VOC, 77.96 tpy CO, and 2788.98 tpy NO_x.

Permit #1165-AOP-R0 was issued on October 20, 1997. This was the initial Title V for this facility and no physical changes were made. Emission rates were 160 tpy PM/PM₁₀, 2,024.7 tpy SO₂, 13.8 tpy VOC, 77.8 tpy CO, and 2,784.6 tpy NO_x.

Permit #1165-AOP-R1 was issued on February 26, 2002. Arkansas Electric Cooperative Corporation (AECC) constructed a Westinghouse 501D5A combustion turbine at the existing Thomas B. Fitzhugh Generating Station (Fitzhugh)(AFIN:24-00012) located at 6006 Lock and Dam Road in Ozark, Arkansas 72949. This unit is used primarily for intermediate and peak load conditions. This new combustion turbine and associated heat recovery steam generator (SN-06) replaced the existing boiler (SN-01). The existing boiler was retired once the new unit was in operation. Also, the SO₂ emissions for the remaining boiler were revised based on an allowable sulfur content of the fuel oil of 0.33% by weight.

In addition to the combustion turbine, a cooling tower (SN-07) was added to the facility. This cooling tower was installed on the existing non-contact, non-chlorinated cooling water system to decrease outfall temperatures when the river water temperatures are high. The addition of this tower was to allow this facility to better comply with its NPDES permit.

Other changes to the permit included removing the fuel oil burning allowance for the auxiliary boiler (SN-02). This boiler now burns only natural gas as fuel. The existing fuel oil tanks (SN-03 through SN-05) remained in the permit. This permit modification also added an emergency generator and a 300 gallon diesel fuel tank for the emergency generator to the facility's insignificant source list.

Prevention of Significant Deterioration

BACT Summary

The following table is a summary of the BACT determinations for the facility.

Source	Pollutant	BACT Determination		
Combustion Turbine (SN-06)	PM/PM ₁₀	Low-ash Fuels	5.9 lb/hr	Natural Gas
			49.8 lb/hr	No. 2 Fuel Oil
	CO	Good combustion practices and design	10 ppm @ 15% O ₂	Natural Gas
			90 ppm @ 15% O ₂	No. 2 Fuel Oil
	SO ₂	Good combustion practices and design	1 ppm @ 15% O ₂	Natural Gas
			Good combustion practices and design 0.33% sulfur	85 ppm @ 15% O ₂
Duct Burners HRSG	PM/PM ₁₀	Low-ash Fuels	4.4 lb/hr	Natural Gas
	CO	Good combustion practices and design	12 ppm @ 15% O ₂	Natural Gas
	SO ₂	Good combustion practices and design	<1 ppm @ 15% O ₂	Natural Gas
Cooling Tower	PM/PM ₁₀	Drift Eliminators	0.4 lb/hr	

Permit #1165-AOP-R2 was issued to Arkansas Electric Cooperative Corporation (AECC) on August 23, 2003. This modification allowed a start-up/shutdown exemption to be added to the permit for SN-06.

Permit #1165-AOP-R3 was issued on July 26, 2007. This modification was to renew the facility's existing permit. In addition, the facility requested the following changes:

- The removal of the Main Boiler (SN-01) which was retired in April 2003.
- The listing of the Auxiliary Boiler (SN-02) as an Insignificant Activity.
- The removal of Fuel Oil Storage Tank #1 (SN-03).
- The addition of language to treat the CO monitor as a 40 CFR Part 75 monitor as agreed upon in CAO LIS#06-078.
- The removal of daily observation of opacity requirement when burning natural gas for SN-06.

Arkansas Electric Cooperative Corporation - Thomas B. Fitzhugh Generating Station
Permit #: 1165-AOP-R7
AFIN: 24-00012

The facility requested to remove the requirement to use two CEMS on the CT/HRSG (SN-06). The Department was unable to comply with the request because both the duct burner and combustion turbine are affected units under the Acid Rain Program. 40 CFR Part 72, §72.6(a)(3) requires new units to comply with the requirements of the Acid Rain Program.

The facility also requested to remove the requirements to submit semi-annual monitoring reports as required in Specific Condition #3 and #9. The Department was unable to comply with the request. The requirements remained as written. With this permitting action there were no changes to the existing permitted emission limits.

Permit #1165-AOP-R4 was issued on May 18, 2009. This modification was to incorporate Clean Air Interstate Rule (CAIR) requirements set forth in Regulation 19, Chapter 14. Permitted emissions remained unchanged.

Permit #1165-AOP-R5 was issued on July 30, 2013. This modification was to renew the facility's existing permit. During this renewal period the Stand-By Diesel Generator Engine (SN-08), the Emergency Fire Pump Engine (SN-09) and the Gasoline Tank (SN-10) were moved from insignificant activities to permitted sources due to their applicability to federal standards. SN-08 is subject to 40 CFR Part 60 Subpart IIII and 40 CFR Part 63 Subpart ZZZZ. SN-09 is subject 40 CFR Part 63 Subpart ZZZZ. SN-10 is subject to 40 CFR Part 63 Subpart CCCCC.

The facility requested to remove the requirement to use two CEMS on the CT/HRSG (SN-06) to eliminate confusion for reporting, maintenance and operation purposes. The facility suggested removing the CEMS on the HRSG stack and only maintaining the CEMS on the CT. The facility proposed to assume worst-case emissions from the duct burners for reporting purpose.

The Department maintained its previous stance; given that both the duct burner and combustion turbine are affected units under the Acid Rain Program both units must individually meet the federal requirements.

Permitted emissions increased as follows: PM/PM₁₀ by 0.3 tons/year (tpy), SO₂ by 0.4 tpy, VOC by 0.6 tpy, CO by 0.4 tpy, NO_x by 1.4 tpy and HAPs by 0.001 tpy.

Permit #1165-AOP-R6 was issued on January 22, 2015. This was an administrative amendment to reestablish the diesel fuel tank as an insignificant activity. During the modification in Permit #1165-AOP-R5, the diesel fuel tank for the stand-by generator was inadvertently omitted from the insignificant activities list. There are no permitted emission changes with this modification.

SECTION IV: SPECIFIC CONDITIONS

SN-04 and SN-05 - Fuel Oil Storage Tanks

Source Description

Fuel oil for use in the boilers is stored in these tanks. The storage capacities of these tanks are 824,962 gallons and 1,036,702 gallons, respectively. These tanks were installed prior to the effective date of the NSPS Subpart K.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #2. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
04	Fuel Oil Storage Tank #2	VOC	0.4	0.2
05	Fuel Oil Storage Tank #3	VOC	0.4	0.2

2. The permittee shall not exceed a combined throughput of 35.1 million gallons of fuel oil at SN-04 and SN-05 per rolling 12 month period. Compliance shall be demonstrated through compliance with Specific Condition #3. [Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]
3. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #2. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The twelve month rolling totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Reg.19.705 and 40 C.F.R. § 52 Subpart E]

SN-06 - Westinghouse 501D5A - Combustion Turbine & HRSG Duct Burners

Source Description

This source is a Westinghouse 501D5A combined-cycle combustion turbine which drives an electric generator, and a heat recovery steam generator (HRSG) which generates steam to drive the existing steam turbine. The generating capacity of the repowered facility unit is estimated at 170.6 MW during summer conditions (98°F). The unit is equipped with duct burners in the HRSG. The duct burners have a heat input of 220 MMBtu/hr.

The combustion turbine is equipped with dry-low NO_x (DLN) burners. These burners are designed to limit the amount of NO_x produced during the combustion process.

SN-06 utilizes water injection when burning fuel oil to reduce NO_x emissions.

Specific Conditions

4. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #6 and #9. [Reg.19.501 et seq. and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
06	Westinghouse 501D5A Combustion Turbine & HRSG Duct Burners	PM ₁₀	54.4	88.9
		SO ₂	514.0	839.8
		VOC	11.2	26.4
		CO	305.8	499.6
		NO _x	273.6	447.0

5. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #6. [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
06	Westinghouse 501D5A Combustion Turbine & HRSG Duct Burners	PM	54.4	88.9
		Formaldehyde	1.1	3.1

6. The permittee shall comply with the following BACT determinations for the combustion turbine / heat recovery system generator. Compliance with the emissions limits set forth in the following table was demonstrated by the initial performance test of the generator performed during August 2003. [§19.901 of Regulation 19 *et seq.*, and 40 CFR Part 52, Subpart E]

Sources	Pollutant	BACT Determination		
Combustion Turbine (SN-06)	PM/PM ₁₀	Low-ash Fuels	5.9 lb/hr	Natural Gas
			49.8 lb/hr	No. 2 Fuel Oil
	CO	Good combustion practices and design	10 ppm @ 15% O ₂	Natural Gas
			90 ppm @ 15% O ₂	No. 2 Fuel Oil
	SO ₂	Good combustion practices and design	1 ppm @ 15% O ₂	Natural Gas
			Good combustion practices and design 0.33% sulfur	85 ppm @ 15% O ₂
Duct Burners HRSG	PM/PM ₁₀	Low-ash Fuels	4.4 lb/hr	Natural Gas
	CO	Good combustion practices and design	12 ppm @ 15% O ₂	Natural Gas
	SO ₂	Good combustion practices and design	<1 ppm @ 15% O ₂	Natural Gas

7. The permittee shall not use more than 9.626 billion cubic feet of natural gas and 35.14 million gallons of fuel oil at SN-06 per rolling 12 month period. When fuel oil and natural gas are combusted during the same twelve month period, natural gas usage shall be limited by the equation in Specific Condition #8. Compliance shall be demonstrated through compliance with Specific Condition #9. [Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. Part 52, Subpart E]
8. When both fuels are combusted in the turbine during the same twelve month period, the following equation shall be used to determine compliance with the fuel limits set forth in Specific Condition #7.

$$y = -0.2535x + 9.626$$

Where:

x = million gallons of No. 2 fuel oil

y = billion standard cubic feet of natural gas

Input the amount of No. 2 fuel oil for x and solve for y. Y will be the maximum amount of natural gas that could be burned in the same twelve month period to remain in compliance. In no case can the limits in Specific Condition #7 be exceeded. [Reg.19.705, Reg.18.1004, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. Part 52, Subpart E]

9. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #7. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The twelve month rolling totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Reg.19.705, Reg.18.1004, 40 C.F.R. Part 52, Subpart E and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
10. The permittee shall maintain, in service, a CEM which monitors the CO emissions for SN-06. With the exception of daily calibrations, quarterly linearity checks, RATA frequencies, and allowable relative accuracies, these CEMS shall be operated in accordance with all applicable conditions of the Department's Continuous Emission Monitoring Systems Conditions as found in Appendix C of this permit. [Reg.19.703, 40 C.F.R. Part 52, Subpart E and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
11. The duct burner is subject to and shall comply with applicable provisions of 40 C.F.R. Part 60 Subpart A - General Provisions and 40 C.F.R. Part 60 Subpart Db. A copy of Subpart Db is provided in Appendix A. Applicable provisions of Subpart Db include, but are not limited to, the following:
 - a. NO_x emissions shall not exceed 0.2 lb/MMBtu heat input. [Reg.19.304 and 40 C.F.R. §60.44b(a)(4)(i)]
 - b. The nitrogen oxides emission standards under §60.44b apply at all times, this includes periods of startup, shutdown, and malfunction. [Reg.19.304 and 40 C.F.R. §60.46b(a)]
 - c. To determine compliance with the emission limit for nitrogen oxides required by 40 C.F.R. §60.44b(a)(4) for duct burners, the owner or operator of the facility shall conduct a performance test required under 40 C.F.R. §60.8 using the nitrogen oxides and oxygen measurement procedures in 40 C.F.R. part 60 Appendix A, Method 20. During the performance test, one sampling site shall be located as close as practicable to the exhaust of the turbine; as provided by 6.1.1 of Method 20. A second sampling site shall be located at the outlet to the steam generating unit. Measurements of nitrogen oxides and oxygen shall be taken at both sampling sites during the performance test. The nitrogen oxides emission rate from the combined cycle system shall be calculated by subtracting the

nitrogen oxides emission rate measured at the sampling site at the outlet from the combustion turbine from the nitrogen oxides emission rate measured at the sampling site at the outlet from the HRSG. [Reg.19.304 and 40 C.F.R. §60.46b(f)]

- d. The owner shall record and maintain records of the amounts of fuel combusted during each day and calculate the annual capacity factor individually for each calendar quarter. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [Reg.19.304 and 40 C.F.R. §60.49b(d)]
 - e. All records required under the section shall be maintained by the owner or operator of the facility for a period of 2 years following the date of such record. [Reg.19.304 and 40 C.F.R. §60.49b(o)]
12. The visible emissions from this source shall not exceed 20% opacity when burning fuel oil and 5% opacity when burning natural gas. Compliance shall be demonstrated through compliance with Specific Condition #13 and #14, respectively. [Reg.19.503 and 40 C.F.R. § 52 Subpart E]
 13. The permittee shall conduct daily observations of the opacity from this source during fuel oil combustion and keep a record of these observations. This daily observation may be performed with a continuous opacity monitor during fuel oil combustion if the permittee chooses to do so. If visible emissions that exceed 20% opacity are detected, the permittee shall take corrective action and perform the observation again. If visible emissions above permitted levels are still present, the permittee shall conduct a 6-minute opacity reading in accordance with EPA Reference Method #9. The results of these readings shall be kept on site and made available to Department personnel upon request. [Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. Part 52, Subpart E]
 14. Compliance with the natural gas opacity limit of 5% shall be demonstrated by burning only pipeline natural gas. There is no daily opacity observation required when burning natural gas. [Reg.18.501 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
 15. The Combustion Turbine/HRSG system (SN-06) is subject to and shall comply with all applicable provisions of 40 C.F.R. Part 60, Subpart A - General Provisions and Subpart GG - Standards of Performance for Stationary Gas Turbines. Applicable provisions of Subpart GG include, but are not limited to the following:
 - a. NO_x emissions shall not exceed 163.1 ppmvd at 15% O₂ at ISO conditions. This condition will be met by complying with Specific Condition #3. [Reg.19.304 and 40 C.F.R. §60.332(a)(1)]
 - b. No fuel shall be fired at SN-06 that contains sulfur in excess of 0.8 percent by weight. [Reg.19.304 and 40 C.F.R. §60.333(b)]

- c. The sulfur content and nitrogen content of the natural gas fired at SN-06 shall be determined and recorded daily. [Reg.19.304 and 40 C.F.R. §60.334(b)]
- d. Periods of excess emissions for NO_x is defined as any period during which the fuel-bound nitrogen in the fuel is greater than the maximum nitrogen content allowed per the performance test. A report of excess emissions shall include the average fuel consumption, ambient conditions, gas turbine load, nitrogen content of the fuel during the period of excess emissions, and copies of any graphs/figures developed during the performance testing. [Reg.19.304 and 40 C.F.R. §60.334(c)(1)]
- e. Periods of excess emissions for SO₂ is defined as any daily period during which the sulfur content of the fuel being fired exceeds 0.8 percent. [Reg.19.304 and 40 C.F.R. §60.334(c)(2)]
- f. Initial compliance testing for NO_x and SO₂ is required within 180 days after start-up. The SO₂ demonstration required will be analysis of the sulfur content of the natural gas using ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81. The NO_x testing shall be conducted in accordance with testing methods in 40 C.F.R. Part 60 Appendix A or alternative approved methods. The testing shall be conducted for each fuel, at four points in the normal operating range of the turbine. [[Reg.19.304 and 40 C.F.R. §60.335 and §60.8]
- g. The monitoring and testing requirements of Specific Condition #15(c), #15(d) and #15(f) are waived if EPA approves the use of 40 C.F.R. Part 75 NO_x CEMS monitoring procedures as an alternative to these requirements. If this approval is granted, excess emissions reporting per Specific Condition #15(d) shall be based on the 40 C.F.R. Part 75 CEMS data.

[Reg.19.304 and 40 C.F.R. Part 60, Subpart GG]

- 16. The permittee shall perform an initial stack test on each Combustion Turbine/HRSG with Duct Burner stack for CO to demonstrate compliance with the limits specified in Specific Condition #4. Continuous compliance shall be demonstrated by complying with Specific Condition #19. [Reg.19.702, Reg.19.901, and 40 C.F.R. Part 52, Subpart E]
- 17. The permittee shall perform an initial stack test on each Combustion Turbine/HRSG with Duct Burner stack for NO_x to demonstrate compliance with the limits specified in Specific Condition #4. Continuous compliance shall be demonstrated by complying with Specific Condition #19. [Reg.19.702, Reg.19.901, and 40 C.F.R. Part 52, Subpart E]
- 18. Monitoring requirements relative to NO_x emissions from the Combustion Turbine/HRSG shall be as follows:
 - a. The permittee shall install, calibrate, maintain, and operate a NO_x CEMS on each Combustion Turbine/HRSG with Duct Burner stack. The CEMS shall comply

with 40 CFR Part 75. The permittee shall use the measured concentrations of NO_x and O₂ in the flue gas along with the measured fuel flow (or another 40 CFR Part 75 procedure) to calculate NO_x mass emissions. The CEMS shall be used to demonstrate compliance with the NO_x mass emission limits in Specific Condition #4.

- b. The permittee shall monitor fuel nitrogen content (unless approval from U.S. EPA to use the NO_x CEMS in lieu of fuel nitrogen content sampling is obtained).
 - c. The permittee shall maintain records which demonstrate compliance with Specific Condition #18 (a) and (b).
[Reg.19.703, 40 C.F.R. Part 52, Subpart E, 40 C.F.R. Part 60, Subpart GG, 40 C.F.R. Part 75, Subpart B and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
19. CEMS shall be used to demonstrate compliance with NO_x and CO emission limits in Specific Condition #4 and NO_x limits listed in Specific Condition #11. [Reg.19.901 *et seq.*, 40 C.F.R. Part 52, Subpart E, Reg.19.304 and 40 C.F.R. Part 75]
 20. The permittee shall perform an initial stack test on the Combustion Turbine/HRSG with Duct Burner stack for formaldehyde and to quantify other non-criteria pollutants not accounted for in this permit. This test will be used to demonstrate compliance with the limits specified in Specific Condition #5. Testing shall be performed one time in accordance with Plantwide Condition #4 and EPA Reference Method 18 as found in 40 CFR Part 60, Appendix A. Testing shall be performed at or near maximum operating load. The testing was performed on August 12-14, 2003 which showed the facility to be in compliance, and no further testing for these pollutants is required. [Reg.18.1002, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
 21. For the purposes of this permit, "upset condition" reports as required by Reg.19.601 shall not be required for periods of startup excess emissions from SN-06 unless such periods of excess startup emissions exceed a four hour period or are in violation after initial attainment of 80 megawatts from the combustion turbine generator (whichever is less). Reports shall not be required during a one hour period preceding shutdown. This shall only apply for "upset conditions" which directly result from the start-up and/or shut down of SN-06. All other "upset conditions" must be reported as required by Regulation 19. Additionally, the following conditions must be met during start up and shut down periods.
 - a. CEM systems for SN-06 must be operating during start up and shut down. The emissions recorded during these periods shall count toward the annual ton per year permit limits.
 - b. The permittee shall maintain a log or equivalent electronic data storage which shall indicate the date, start time, and duration of each start up and shut down procedure.

"Start-up" shall be defined as the period of time beginning with the first fire within the combustion turbine firing chamber until the unit initially reaches an output of 80 megawatts from the combustion turbine generator or a maximum of four hours. "Shut down" shall be defined as the period of time up to one hour beginning with the initiation of the shutdown procedure and ending when emissions are no longer detected from the source. This log or equivalent electronic data storage shall be made available to Department personnel upon request.

- c. Excess opacity is not included. If any excess opacity should ever occur, upset condition reporting is required.
- d. Operating mode, specifically the current combustion turbine operating load, shall be able to be identified at any time from the control area for that unit and shall be available for inspection by ADEQ representatives at any time.
- e. Requirements of ADEQ CEMS Condition (II) (F) are not applicable to this permit. However, the facility shall still comply with the 40 CFR 60.7 requirements to maintain 95% CEMS uptime during non-startup/ shutdown periods and 99% compliance demonstration during these periods along with the required reporting requirements.

[Reg.19.601 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN-07 - Cooling Tower

Source Description

The cooling tower is use to reduce the temperature of the effluent before it is discharged to the Arkansas River.

Specific Conditions

22. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition 24. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
07	Cooling Tower	PM ₁₀	0.5	2.0

23. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #24. [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
07	Cooling Tower	PM	0.5	2.0

24. The permittee shall operate the cooling tower with a drift eliminator according to the manufacturer's specifications. [Reg.19.303, Reg.18.1104, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
25. The permittee shall not cause to be discharged to the atmosphere from SN-07 exhausts which exhibit greater than 20% opacity. Compliance with this opacity limit shall be demonstrated by compliance with Specific Condition #26. [Reg.19.503 and 40 C.F.R. 52 Subpart E]
26. Within 60 days of issuance of Permit 1165-AOP-R5, the facility shall begin testing for total dissolved solids (TDS) at SN-07. The permittee shall monitor monthly the TDS. Results less than 1,000 ppm TDS, or equivalent conductivity, will demonstrate compliance with the requirements in Specific Conditions #22 and #23. These records shall be updated on a monthly basis. If the facility chooses to use conductivity in place of TDS testing the permittee shall develop a conductivity vs. TDS curve and test for conductivity on a weekly basis when the cooling towers are operating. The conductivity result shall not exceed the level which correlates with 1,000 ppm TDS for any sample result taken when the cooling towers are operating. The permittee shall also determine, directly, TDS once every quarter. The results shall be kept on site and made available to Department personnel upon request. The permittee shall submit

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these records in accordance with General Provision 7. [Reg.19.705 and Reg.19.703, Reg.18.1004 and Reg.18.1003, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN-08 - Stand-By Diesel Generator Engine

Source Description

The Stand-By Diesel Generator is a reciprocating internal combustion engine subject to NSPS Subpart IIII and NESHAP Subpart ZZZZ. The unit is a 460-hp rated diesel-fired engine that produces approximately 300 kW at full-load.

Specific Conditions

27. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #29 through #35. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
08	Stand-By Diesel Generator Engine	PM ₁₀	0.1	0.1
		SO ₂	1.0	0.3
		VOC	0.2	0.1
		CO	0.6	0.2
		NO _x	4.1	1.1

28. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #29 through #35. [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
08	Stand-By Diesel Generator Engine	PM	0.1	0.1
		Total HAPs	0.004	0.001

29. The permittee must certify SN-08 to the certification emission standards for new nonroad CI engines in 40 C.F.R. §89.112, for all pollutants, for the same model year and maximum engine power. The permittee shall meet the emission standards as required in §60.4205 over the entire life of the engine. [Reg.19.304 and 40 C.F.R. §§60.4201(a), 60.4204(b), 60.4206]
30. The permittee shall only use diesel fuel that meets the requirements of 40 C.F.R. §80.510(a) and (b). [Reg.19.304 and 40 C.F.R. §§60.4207(a) and (b)]

31. The permittee shall not import or install a stationary CI ICE that do not meet the applicable requirements for 2011 model year non-emergency engines. [Reg.19.304 and 40 C.F.R. §60.4208(e)]
32. If this engine is fitted with a diesel particulate filter, then it should have a backpressure monitor that notifies the permittee when the high pressure limit of the engine is approached to meet the monitoring requirements of Subpart IIII. The permittee shall keep records of any corrective action taken after the backpressure monitor has notified the permittee. [Reg.19.304 and 40 C.F.R. §§60.4209(b) and 60.4214(b)]
33. The permittee shall demonstrate compliance with the emission standards in Subpart IIII by complying with the following except as permitted under Specific Condition #35:
 - a. Operate and maintain SN-08 according to the manufacturer's emission-related written instructions;
 - b. Change only those emission related settings that are permitted by the manufacturer; and
 - c. Meet the requirements of 40 C.F.R. pt 89, 94, and/or 1068, as applicable.

[Reg.19.304 and 40 C.F.R. §§60.4211(a)(1), (2) and (3)]
34. The permittee must comply with specific Condition #29 by purchasing an engine certified to the emission standards in §60.4205(c) as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in Specific Condition #35. [Reg.19.304 and 40 C.F.R. §60.4211(c)]
35. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows: [Reg.19.304 and 40 C.F.R. §60.4011(g)]
 - The permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

SN-10 - Gasoline Tank

Source Description

This unit is a 140-gallon tank that fuels fleet vehicles and other small engines. The monthly throughput of this tank is less than 10,000 gallons of gasoline. This unit is subject to NESHAP CCCCCC.

Specific Conditions

36. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #37. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
10	Gasoline Tank	VOC	0.1	0.1

37. The permittee shall not exceed a throughput of 10,000 gallons of gasoline at SN-10 per month. [Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]
38. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #37. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The twelve month rolling totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Reg.19.705 and 40 C.F.R. § 52 Subpart E]
39. The permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
- a. Minimize gasoline spills;
 - b. Clean up spills as expeditiously as practicable;
 - c. Cover all open gasoline storage tank fill-pipes with a gasketed seal when not in use;
 - d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators. [Reg.19.304 and 40 C.F.R. §63.1116(a)]
40. The permittee shall have records available within 24 hours of a request by the Department to document gasoline throughput. [Reg.19.304 and 40 C.F.R. §63.1116(b)]

SN-11 - Stand-By Fire Pump Engine

Source Description

The Stand-By Fire Pump Engine is a diesel-fired engine that drives a fire pump. This unit is subject to NSPS Subpart IIII and NESHAP Subpart ZZZZ. This source is a 175-horsepower compression ignition engine located at an area source for HAPs.

Specific Conditions

41. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #43 through #53. [Reg.19.501 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
11	Stand-By Fire Pump Engine	PM ₁₀	0.1	0.1
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.3	0.1
		NO _x	1.1	0.3

42. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #43 through #53. [Reg.18.801 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
11	Stand-By Fire Pump Engine	PM	0.1	0.1
		Total HAPs	0.1	0.1

43. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
11	20%	Reg.19.503 and 40 C.F.R. § 52 Subpart E

44. Annual observations of the opacity from SN-11 shall be conducted by a person trained but not necessarily certified in EPA Reference Method 9/a certified EPA Reference

Method 9 reader. If visible emissions in excess of the permitted levels are detected, the permittee shall immediately take action to identify the cause of the visible emissions in excess of the permit limit, implement corrective action, and document that visible emissions did not appear to be in excess of the permitted opacity following the corrective action/perform an EPA Reference Method 9 test to verify emissions are not in excess of the permitted level]. The permittee shall maintain records which contain the following items in order to demonstrate compliance with this specific condition. These records shall be updated annually, kept on site, and made available to Department personnel upon request.

- a. The date and time of the observation.
- b. If visible emissions which appeared to be above the permitted limit were detected.
- c. If visible emissions which appeared to be above the permitted limit were detected, the cause of the exceedance of the opacity limit, the corrective action taken, and if the visible emissions appeared to be below the permitted limit after the corrective action was taken.
- d. The name of the person conducting the opacity observations.

[Reg.18.1004 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

45. The permittee shall not operate SN-11 in excess of 500 total hours (emergency and non-emergency) per calendar year in order to demonstrate compliance with the annual emission rate limits. Emergency operation in excess of these hours may be allowable but shall be reported and will be evaluated in accordance with Reg.19.602 and other applicable regulations. [Reg.19.705, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. §70.6]
46. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #45. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The calendar year totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Reg.19.705 and 40 C.F.R. §52 Subpart E]

NESHAP Subpart ZZZZ

47. SN-11 must meet the requirements of 40 C.F.R. Part 63, Subpart ZZZZ by meeting the requirements of 40 C.F.R. Part 60, Subpart IIII. [Reg.19.304 and 40 C.F.R. §63.6590(c)(1)]

NSPS Subpart IIII

48. The permittee must comply with the emission standards in Table 1 below to this for all pollutants. [Reg.19.304 and 40 C.F.R. §60.4205(c)]

Table 1: Emission Standards for Stationary Fire Pump Engines in g/KW-hr (g/HP-hr)

NMHC + NO _x	PM
4.0(3.0)	0.20(0.15)

49. The permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in Specific Condition #48 over the entire life of the engine. [Reg.19.304 and 40 C.F.R. §60.4206]
50. The permittee must use diesel fuel that meets the requirements of 40 C.F.R. 80.510(b). [Reg.19.304 and 40 C.F.R. §60.4207(b)]
51. The permittee must do all of the following, except as permitted under Specific Condition #53: [Reg.19.304 and 40 C.F.R. §60.4211(a)]
 - a) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
 - b) Change only those emission-related settings that are permitted by the manufacturer; and
 - c) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.
52. The permittee must comply with specific Condition #48 by purchasing an engine certified to the emission standards in §60.4205(c) as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in Specific Condition #53. [Reg.19.304 and 40 C.F.R. §60.4211(c)]
53. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows: [Reg.19.304 and 40 C.F.R. §60.4011(g)]
 - The permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

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SECTION V: COMPLIANCE PLAN AND SCHEDULE

Arkansas Electric Cooperative Corporation - Thomas B. Fitzhugh Generating Station will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

SECTION VI: PLANTWIDE CONDITIONS

1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Reg.19.704, 40 C.F.R. § 52 Subpart E, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Reg.19.410(B) and 40 C.F.R. § 52 Subpart E]
3. The permittee must test any equipment scheduled for testing, unless otherwise stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) business days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) calendar days after completing the testing. [Reg.19.702 and/or Reg.18.1002 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
4. The permittee must provide:
 - a. Sampling ports adequate for applicable test methods;
 - b. Safe sampling platforms;
 - c. Safe access to sampling platforms; and
 - d. Utilities for sampling and testing equipment.

[Reg.19.702 and/or Reg.18.1002 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Reg.19.303 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
6. This permit subsumes and incorporates all previously issued air permits for this facility. [Reg. 26 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

Acid Rain (Title IV)

7. The Director prohibits the permittee to cause any emissions exceeding any allowances the source lawfully holds under Title IV of the Act or the regulations promulgated under the Act. No permit revision is required for increases in emissions allowed by allowances acquired pursuant to the acid rain program, if such increases do not require a permit revision under any other applicable requirement. This permit establishes no limit on the number of allowances held by the permittee. However, the source may not use allowances as a defense for noncompliance with any other applicable requirement of this permit or the Act. The permittee will account for any such allowance according to the procedures established in regulations promulgated under Title IV of the Act. A copy of the facility's Acid Rain Permit is attached in an appendix to this Title V permit. [Reg.26.701 and 40 C.F.R. § 70.6(a)(4)]

Title VI Provisions

8. The permittee must comply with the standards for labeling of products using ozone-depleting substances. [40 C.F.R. § 82 Subpart E]
 - a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to § 82.106.
 - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
 - c. The form of the label bearing the required warning must comply with the requirements pursuant to § 82.110.
 - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
9. The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 C.F.R. § 82 Subpart F]
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC like appliances must comply with record keeping requirements pursuant to § 82.166. ("MVAC like appliance" as defined at § 82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to § 82.156.

- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
10. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 C.F.R. § 82 Subpart A, Production and Consumption Controls.
11. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 C.F.R. § 82 Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC 22 refrigerant.

12. The permittee can switch from any ozone depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 C.F.R. § 82 Subpart G.

CSAPR

Transport Rule (TR) NO_x Ozone Season Trading Program Requirements

13. The permittee shall comply with the following TR NO_x Ozone Season Trading Program Requirements. The unit-specific monitoring provisions are attached to this Title V permit (see below). [40 C.F.R. § 97 Subpart BBBBB and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
 - a. Designated representative requirements.
The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 C.F.R. §§ 97.513 through 97.518.
 - b. Emissions monitoring, reporting, and recordkeeping requirements.
 1. The owners and operators, and the designated representative, of each TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 C.F.R. §§ 97.530 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.531 (initial monitoring system certification and recertification procedures), 97.532 (monitoring system out-of-control periods), 97.533 (notifications concerning monitoring), 97.534 (recordkeeping and reporting, including

- monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.535 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
2. The emissions data determined in accordance with 40 C.F.R. §§ 97.530 through 97.535 shall be used to calculate allocations of TR NO_x Ozone Season allowances under 40 C.F.R. §§ 97.511(a)(2) and (b) and 97.512 and to determine compliance with the TR NO_x Ozone Season emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 C.F.R. §§ 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.
- c. NO_x emissions requirements.
1. TR NO_x Ozone Season emissions limitation.
 - i. As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, TR NO_x Ozone Season allowances available for deduction for such control period under 40 C.F.R. § 97.524(a) in an amount not less than the tons of total NO_x emissions for such control period from all TR NO_x Ozone Season units at the source.
 - ii. If total NO_x emissions during a control period in a given year from the TR NO_x Ozone Season units at a TR NO_x Ozone Season source are in excess of the TR NO_x Ozone Season emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - A. The owners and operators of the source and each TR NO_x Ozone Season unit at the source shall hold the TR NO_x Ozone Season allowances required for deduction under 40 C.F.R. § 97.524(d); and
 - B. The owners and operators of the source and each TR NO_x Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 C.F.R. § 97 Subpart BBBBB and the Clean Air Act.
 2. TR NO_x Ozone Season assurance provisions.
 - i. If total NO_x emissions during a control period in a given year from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for

such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_x Ozone Season allowances available for deduction for such control period under 40 C.F.R. § 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 C.F.R. § 97.525(b), of multiplying—

- A. The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and
 - B. The amount by which total NO_x emissions from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state for such control period exceed the state assurance level.
- ii. The owners and operators shall hold the TR NO_x Ozone Season allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
 - iii. Total NO_x emissions from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the State NO_x Ozone Season trading budget under 40 C.F.R. § 97.510(a) and the state's variability limit under 40 C.F.R. § 97.510(b).
 - iv. It shall not be a violation of 40 C.F.R. § 97 Subpart BBBBBB or of the Clean Air Act if total NO_x emissions from all TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the TR NO_x Ozone Season units at TR NO_x Ozone Season sources in the state during a control period exceeds the common designated representative's assurance level.
 - v. To the extent the owners and operators fail to hold TR NO_x Ozone Season allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,

- A. The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - B. Each TR NO_x Ozone Season allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 C.F.R. § 97 Subpart BBBBB and the Clean Air Act.
3. Compliance periods.
 - i. A TR NO_x Ozone Season unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 C.F.R. § 97.530(b) and for each control period thereafter.
 - ii. A TR NO_x Ozone Season unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 C.F.R. § 97.530(b) and for each control period thereafter.
4. Vintage of allowances held for compliance.
 - i. A TR NO_x Ozone Season allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO_x Ozone Season allowance that was allocated for such control period or a control period in a prior year.
 - ii. A TR NO_x Ozone Season allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO_x Ozone Season allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
5. Allowance Management System requirements. Each TR NO_x Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 C.F.R. § 97 Subpart BBBBB.
6. Limited authorization. A TR NO_x Ozone Season allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
 - i. Such authorization shall only be used in accordance with the TR NO_x Ozone Season Trading Program; and
 - ii. Notwithstanding any other provision of 40 C.F.R. § 97 Subpart BBBBB, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the

Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

7. Property right. A TR NO_x Ozone Season allowance does not constitute a property right.
- d. Title V permit revision requirements.
 1. No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO_x Ozone Season allowances in accordance with 40 C.F.R. § 97 Subpart BBBBB.
 2. This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 C.F.R. §§ 97.530 through 97.535, and the requirements for a continuous emission monitoring system (pursuant to 40 C.F.R. § 75 Subparts B and H), an excepted monitoring system (pursuant to 40 C.F.R. § 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 C.F.R. § 75.19), and an alternative monitoring system (pursuant to 40 C.F.R. § 75 Subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 C.F.R. §§ 97.506(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).
 - e. Additional recordkeeping and reporting requirements.
 1. Unless otherwise provided, the owners and operators of each TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - i. The certificate of representation under 40 C.F.R. § 97.516 for the designated representative for the source and each TR NO_x Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 C.F.R. § 97.516 changing the designated representative.
 - ii. All emissions monitoring information, in accordance with 40 C.F.R. § 97 Subpart BBBBB.
 - iii. Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO_x Ozone Season Trading Program.
 2. The designated representative of a TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall make all submissions required under the TR NO_x Ozone Season Trading Program, except as provided in 40 C.F.R. § 97.518. This requirement does not change, create

an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 C.F.R. §§ 70 and 71.

f. Liability.

1. Any provision of the TR NO_x Ozone Season Trading Program that applies to a TR NO_x Ozone Season source or the designated representative of a TR NO_x Ozone Season source shall also apply to the owners and operators of such source and of the TR NO_x Ozone Season units at the source.
2. Any provision of the TR NO_x Ozone Season Trading Program that applies to a TR NO_x Ozone Season unit or the designated representative of a TR NO_x Ozone Season unit shall also apply to the owners and operators of such unit.

g. Effect on other authorities.

No provision of the TR NO_x Ozone Season Trading Program or exemption under 40 C.F.R. § 97.505 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_x Ozone Season source or TR NO_x Ozone Season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of Reg.26.304 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated June 6, 2016.

Description	Category
Main building heater (4.185 MMBTU/hr natural gas fired)	A-1
Shop heater (0.15 MMBTU/hr natural gas fired)	A-1
Warehouse heater (0.08 MMBTU/hr natural gas fired)	A-1
Warehouse heater (0.075 MMBTU/hr natural gas fired)	A-1
Intake heater (0.15 MMBTU/hr natural gas fired)	A-1
Firehouse heater (0.08 MMBTU/hr natural gas fired)	A-1
Diesel fuel tank for Stand-By Diesel Generator (250 gallon) – Back up tank	A-3
Diesel fuel tank for Stand-By Fire Pump Engine (300 gallon)	A-3
Diesel fuel tank for Stand-By Diesel Generator (525 gallon)	A-3
Diesel fuel tank (2,000 gallon) – Back up tank	A-3

SECTION VIII: GENERAL PROVISIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute. [40 C.F.R. § 70.6(b)(2)]
2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 C.F.R. § 70.6(a)(2) and Reg.26.701(B)]
3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [Reg.26.406]
4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.* (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 C.F.R. § 70.6(a)(1)(ii) and Reg.26.701(A)(2)]
5. The permittee must maintain the following records of monitoring information as required by this permit.
 - a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses performed;
 - c. The company or entity performing the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[40 C.F.R. § 70.6(a)(3)(ii)(A) and Reg.26.701(C)(2)]

6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 C.F.R. § 70.6(a)(3)(ii)(B) and Reg.26.701(C)(2)(b)]
7. The permittee must submit reports of all required monitoring every six (6) months. If the permit establishes no other reporting period, the reporting period shall end on the last day of the month six months after the issuance of the initial Title V permit and every six months thereafter. The report is due on the first day of the second month after the end of the reporting period. The first report due after issuance of the initial Title V permit shall contain six months of data and each report thereafter shall contain 12 months of data. The report shall contain data for all monitoring requirements in effect during the reporting period. If a monitoring requirement is not in effect for the entire reporting period, only those months of data in which the monitoring requirement was in effect are required to be reported. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Reg.26.2 must certify all required reports. The permittee will send the reports to the address below:

Arkansas Department of Environmental Quality
Air Division
ATTN: Compliance Inspector Supervisor
5301 Northshore Drive
North Little Rock, AR 72118-5317

[40 C.F.R. § 70.6(a)(3)(iii)(A) and Reg.26.701(C)(3)(a)]

8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.
 - a. For all upset conditions (as defined in Reg.19.601), the permittee will make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:
 - i. The facility name and location;
 - ii. The process unit or emission source deviating from the permit limit;
 - iii. The permit limit, including the identification of pollutants, from which deviation occurs;
 - iv. The date and time the deviation started;
 - v. The duration of the deviation;
 - vi. The emissions during the deviation;
 - vii. The probable cause of such deviations;
 - viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future; and

ix. The name of the person submitting the report.

The permittee shall make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

[Reg.19.601, Reg.19.602, Reg.26.701(C)(3)(b), and 40 C.F.R. § 70.6(a)(3)(iii)(B)]

9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 C.F.R. § 70.6(a)(5), Reg.26.701(E), and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. § 7401, *et seq.* and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 C.F.R. § 70.6(a)(6)(i) and Reg.26.701(F)(1)]
11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 C.F.R. § 70.6(a)(6)(ii) and Reg.26.701(F)(2)]
12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 C.F.R. § 70.6(a)(6)(iii) and Reg.26.701(F)(3)]
13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 C.F.R. § 70.6(a)(6)(iv) and Reg.26.701(F)(4)]

14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 C.F.R. § 70.6(a)(6)(v) and Reg.26.701(F)(5)]
15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 C.F.R. § 70.6(a)(7) and Reg.26.701(G)]
16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 C.F.R. § 70.6(a)(8) and Reg.26.701(H)]
17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 C.F.R. § 70.6(a)(9)(i) and Reg.26.701(I)(1)]
18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 C.F.R. § 70.6(b) and Reg.26.702(A) and (B)]
19. Any document (including reports) required by this permit pursuant to 40 C.F.R. § 70 must contain a certification by a responsible official as defined in Reg.26.2. [40 C.F.R. § 70.6(c)(1) and Reg.26.703(A)]
20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 C.F.R. § 70.6(c)(2) and Reg.26.703(B)]
 - a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.

21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually. If the permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due on the first day of the second month after the end of the reporting period. The permittee must also submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 C.F.R. § 70.6(c)(5) and Reg.26.703(E)(3)]
 - a. The identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status;
 - c. Whether compliance was continuous or intermittent;
 - d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
 - e. Such other facts as the Department may require elsewhere in this permit or by § 114(a)(3) and § 504(b) of the Act.
22. Nothing in this permit will alter or affect the following: [Reg.26.704(C)]
 - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
 - b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program, consistent with § 408(a) of the Act; or
 - d. The ability of EPA to obtain information from a source pursuant to § 114 of the Act.
23. This permit authorizes only those pollutant emitting activities addressed in this permit. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
24. The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion in the following circumstances:
 - a. Such an extension does not violate a federal requirement;
 - b. The permittee demonstrates the need for the extension; and
 - c. The permittee documents that all reasonable measures have been taken to meet the current deadline and documents reasons it cannot be met.

[Reg.18.314(A), Reg.19.416(A), Reg.26.1013(A), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

25. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Department approval. Any such emissions shall be included in the facility's total emissions and reported as such. The Department may grant such a request, at its discretion under the following conditions:
- a. Such a request does not violate a federal requirement;
 - b. Such a request is temporary in nature;
 - c. Such a request will not result in a condition of air pollution;
 - d. The request contains such information necessary for the Department to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur;
 - e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
 - f. The permittee maintains records of the dates and results of such temporary emissions/testing.

[Reg.18.314(B), Reg.19.416(B), Reg.26.1013(B), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

26. The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion under the following conditions:
- a. The request does not violate a federal requirement;
 - b. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and
 - c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

[Reg.18.314(C), Reg.19.416(C), Reg.26.1013(C), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

Appendix A

40 C.F.R. §52.21 Prevention of Significant Deterioration (PSD) regulations

§52.21 Prevention of significant deterioration of air quality.

[Link to an amendment published at 81 FR 35633, June 3, 2016.](#)

(a)(1) *Plan disapproval.* The provisions of this section are applicable to any State implementation plan which has been disapproved with respect to prevention of significant deterioration of air quality in any portion of any State where the existing air quality is better than the national ambient air quality standards. Specific disapprovals are listed where applicable, in subparts B through DDD and FFF of this part. The provisions of this section have been incorporated by reference into the applicable implementation plans for various States, as provided in subparts B through DDD and FFF of this part. Where this section is so incorporated, the provisions shall also be applicable to all lands owned by the Federal Government and Indian Reservations located in such State. No disapproval with respect to a State's failure to prevent significant deterioration of air quality shall invalidate or otherwise affect the obligations of States, emission sources, or other persons with respect to all portions of plans approved or promulgated under this part.

(2) *Applicability procedures.* (i) The requirements of this section apply to the construction of any new major stationary source (as defined in paragraph (b)(1) of this section) or any project at an existing major stationary source in an area designated as attainment or unclassifiable under sections 107(d)(1)(A)(ii) or (iii) of the Act.

(ii) The requirements of paragraphs (j) through (r) of this section apply to the construction of any new major stationary source or the major modification of any existing major stationary source, except as this section otherwise provides.

(iii) No new major stationary source or major modification to which the requirements of paragraphs (j) through (r)(5) of this section apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements. The Administrator has authority to issue any such permit.

(iv) The requirements of the program will be applied in accordance with the principles set out in paragraphs (a)(2)(iv)(a) through (f) of this section.

(a) Except as otherwise provided in paragraphs (a)(2)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases—a significant emissions increase (as defined in paragraph (b)(40) of this section), and a significant net emissions increase (as defined in paragraphs (b)(3) and (b)(23) of this section). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

(b) The procedure for calculating (before beginning actual construction) whether a significant emissions increase (i.e., the first step of the process) will occur depends upon the type of emissions units being modified, according to paragraphs (a)(2)(iv)(c) through (f) of this section. The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur at the major stationary source (i.e., the second step of the process) is contained in the definition in paragraph (b)(3) of this section. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

(c) *Actual-to-projected-actual applicability test for projects that only involve existing emissions units.* A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions (as defined in paragraph (b)(41) of this section) and the baseline actual emissions (as defined in paragraphs (b)(48)(i) and (ii) of this section), for each existing emissions unit, equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section).

(d) *Actual-to-potential test for projects that only involve construction of a new emissions unit(s).* A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in paragraph (b)(4) of this section) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in paragraph (b)(48)(iii) of this section) of these units before the project equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section).

(e) [Reserved]

(f) *Hybrid test for projects that involve multiple types of emissions units.* A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in paragraphs (a)(2)(iv)(c) through (d) of this section as applicable with respect to each emissions unit, for each type of emissions unit equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section).

(v) For any major stationary source for a PAL for a regulated NSR pollutant, the major stationary source shall comply with the requirements under paragraph (aa) of this section.

(b) *Definitions.* For the purposes of this section:

(1)(i) *Major stationary source* means:

(a) Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant: Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants (with thermal dryers), primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants (which does not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140), fossil-fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;

(b) Notwithstanding the stationary source size specified in paragraph (b)(1)(i) of this section, any stationary source which emits, or has the potential to emit, 250 tons per year or more of a regulated NSR pollutant; or

(c) Any physical change that would occur at a stationary source not otherwise qualifying under paragraph (b)(1) of this section, as a major stationary source, if the changes would constitute a major stationary source by itself.

(ii) A major source that is major for volatile organic compounds or NO_x shall be considered major for ozone.

(iii) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this section whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:

(a) Coal cleaning plants (with thermal dryers);

(b) Kraft pulp mills;

(c) Portland cement plants;

(d) Primary zinc smelters;

(e) Iron and steel mills;

(f) Primary aluminum ore reduction plants;

(g) Primary copper smelters;

(h) Municipal incinerators capable of charging more than 250 tons of refuse per day;

(i) Hydrofluoric, sulfuric, or nitric acid plants;

(j) Petroleum refineries;

(k) Lime plants;

(l) Phosphate rock processing plants;

(m) Coke oven batteries;

(n) Sulfur recovery plants;

(o) Carbon black plants (furnace process);

(p) Primary lead smelters;

(q) Fuel conversion plants;

(r) Sintering plants;

(s) Secondary metal production plants;

(t) Chemical process plants—The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;

(u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;

(v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

(w) Taconite ore processing plants;

(x) Glass fiber processing plants;

(y) Charcoal production plants;

(z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, and

(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.

(2)(i) *Major modification* means any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase (as defined in paragraph (b)(40) of this section) of a regulated NSR pollutant (as defined in paragraph (b)(50) of this section); and a significant net emissions increase of that pollutant from the major stationary source.

(ii) Any significant emissions increase (as defined at paragraph (b)(40) of this section) from any emissions units or net emissions increase (as defined in paragraph (b)(3) of this section) at a major stationary source that is significant for volatile organic compounds or NO_x shall be considered significant for ozone.

(iii) A physical change or change in the method of operation shall not include:

(a) Routine maintenance, repair and replacement. Routine maintenance, repair and replacement shall include, but not be limited to, any activity(s) that meets the requirements of the equipment replacement provisions contained in paragraph (cc) of this section;

NOTE TO PARAGRAPH (b)(2)(iii)(a): By court order on December 24, 2003, the second sentence of this paragraph (b)(2)(iii)(a) is stayed indefinitely. The stayed provisions will become effective immediately if the court terminates the stay. At that time, EPA will publish a document in the FEDERAL REGISTER advising the public of the termination of the stay.

(b) Use of an alternative fuel or raw material by reason of an order under sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plant pursuant to the Federal Power Act;

(c) Use of an alternative fuel by reason of an order or rule under section 125 of the Act;

(d) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

(e) Use of an alternative fuel or raw material by a stationary source which:

(1) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or 40 CFR 51.166; or

(2) The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;

(f) An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or 40 CFR 51.166.

(g) Any change in ownership at a stationary source.

(h) [Reserved]

(i) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

(1) The State implementation plan for the State in which the project is located, and

(2) Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(j) The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.

(k) The reactivation of a very clean coal-fired electric utility steam generating unit.

(iv) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under paragraph (aa) of this section for a PAL for that pollutant. Instead, the definition at paragraph (aa)(2)(viii) of this section shall apply.

(v) Fugitive emissions shall not be included in determining for any of the purposes of this section whether a physical change in or change in the method of operation of a major stationary source is a major modification, unless the source belongs to one of the source categories listed in paragraph (b)(1)(iii) of this section.

(3)(i) *Net emissions increase* means, with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:

(a) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to paragraph (a)(2)(iv) of this section; and

(b) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this paragraph (b)(3)(i)(b) shall be determined as provided in paragraph (b)(48) of this section, except that paragraphs (b)(48)(i)(c) and (b)(48)(ii)(d) of this section shall not apply.

(ii) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:

(a) The date five years before construction on the particular change commences; and

(b) The date that the increase from the particular change occurs.

(iii) An increase or decrease in actual emissions is creditable only if:

(a) The Administrator or other reviewing authority has not relied on it in issuing a permit for the source under this section, which permit is in effect when the increase in actual emissions from the particular change occurs; and

(b) The increase or decrease in emissions did not occur at a Clean Unit except as provided in paragraphs (x)(8) and (y)(10) of this section.

(c) As it pertains to an increase or decrease in fugitive emissions (to the extent quantifiable), it occurs at an emissions unit that is part of one of the source categories listed in paragraph (b)(1)(iii) of this section or it occurs at an emission unit that is located at a major stationary source that belongs to one of the listed source categories. (iv) An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

(v) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(vi) A decrease in actual emissions is creditable only to the extent that:

(a) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

(b) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins.

(c) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and

(vii) [Reserved]

(viii) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

(ix) Paragraph (b)(21)(ii) of this section shall not apply for determining creditable increases and decreases.

(4) *Potential to emit* means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

(5) *Stationary source* means any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant.

(6) *Building, structure, facility, or installation* means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they

belong to the same "Major Group" (i.e., which have the same first two digit code) as described in the *Standard Industrial Classification Manual, 1972*, as amended by the 1977 Supplement (U. S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively).

(7) *Emissions unit* means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric utility steam generating unit as defined in paragraph (b)(31) of this section. For purposes of this section, there are two types of emissions units as described in paragraphs (b)(7)(i) and (ii) of this section.

(i) A new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than 2 years from the date such emissions unit first operated.

(ii) An existing emissions unit is any emissions unit that does not meet the requirements in paragraph (b)(7)(i) of this section. A replacement unit, as defined in paragraph (b)(33) of this section, is an existing emissions unit.

(8) *Construction* means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions.

(9) *Commence* as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:

(i) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(ii) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

(10) *Necessary preconstruction approvals or permits* means those permits or approvals required under Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State Implementation Plan.

(11) *Begin actual construction* means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipework and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

(12) *Best available control technology* means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR parts 60 and 61. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree

possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(13)(i) *Baseline concentration* means that ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:

(a) The actual emissions, as defined in paragraph (b)(21) of this section, representative of sources in existence on the applicable minor source baseline date, except as provided in paragraph (b)(13)(ii) of this section; and

(b) The allowable emissions of major stationary sources that commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.

(ii) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):

(a) Actual emissions, as defined in paragraph (b)(21) of this section, from any major stationary source on which construction commenced after the major source baseline date; and

(b) Actual emissions increases and decreases, as defined in paragraph (b)(21) of this section, at any stationary source occurring after the minor source baseline date.

(14)(i) *Major source baseline date* means:

(a) In the case of PM₁₀ and sulfur dioxide, January 6, 1975;

(b) In the case of nitrogen dioxide, February 8, 1988; and

(c) In the case of PM_{2.5}, October 20, 2010.

(ii) "Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or a major modification subject to 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the relevant regulations. The trigger date is:

(a) In the case of PM₁₀ and sulfur dioxide, August 7, 1977;

(b) In the case of nitrogen dioxide, February 8, 1988; and

(c) In the case of PM_{2.5}, October 20, 2011.

(iii) The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:

(a) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107(d)(1)(A)(ii) or (iii) of the Act for the pollutant on the date of its complete application under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; and

(b) In the case of a major stationary source, the pollutant would be emitted in significant amounts, or, in the case of a major modification, there would be a significant net emissions increase of the pollutant.

(iv) Any minor source baseline date established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM-10 increments, except that the Administrator shall rescind a minor source baseline date where it can be shown, to the satisfaction of the Administrator, that the emissions increase from the major stationary source, or net emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of PM-10 emissions.

(15)(i) *Baseline area* means any intrastate area (and every part thereof) designated as attainment or unclassifiable under section 107(d)(1)(A)(ii) or (iii) of the Act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact for the pollutant for which the baseline date is established, as follows: equal to or greater than 1 $\mu\text{g}/\text{m}^3$ (annual average) for SO_2 , NO_2 , or PM_{10} ; or equal to or greater than 0.3 $\mu\text{g}/\text{m}^3$ (annual average) for $\text{PM}_{2.5}$.

(ii) Area redesignations under section 107(d)(1)(A)(ii) or (iii) of the Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:

(a) Establishes a minor source baseline date; or

(b) Is subject to 40 CFR 52.21 and would be constructed in the same state as the state proposing the redesignation.

(iii) Any baseline area established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM-10 increments, except that such baseline area shall not remain in effect if the Administrator rescinds the corresponding minor source baseline date in accordance with paragraph (b)(14)(iv) of this section.

(16) *Allowable emissions* means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

(i) The applicable standards as set forth in 40 CFR parts 60 and 61;

(ii) The applicable State Implementation Plan emissions limitation, including those with a future compliance date; or

(iii) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

(17) *Federally enforceable* means all limitations and conditions which are enforceable by the Administrator, including those requirements developed pursuant to 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart I, including operating permits issued under an EPA-approved program that is incorporated into the State implementation plan and expressly requires adherence to any permit issued under such program.

(18) *Secondary emissions* means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

(i) Emissions from ships or trains coming to or from the new or modified stationary source; and

(ii) Emissions from any offsite support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification.

(19) *Innovative control technology* means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.

(20) *Fugitive emissions* means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(21)(i) *Actual emissions* means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with paragraphs (b)(21)(ii) through (iv) of this section, except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under paragraph (aa) of this section. Instead, paragraphs (b)(41) and (b)(48) of this section shall apply for those purposes.

(ii) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The Administrator shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(iii) The Administrator may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(iv) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(22) *Complete* means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application.

(23)(i) Significant means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

POLLUTANT AND EMISSIONS RATE

Carbon monoxide: 100 tons per year (tpy)

Nitrogen oxides: 40 tpy

Sulfur dioxide: 40 tpy

Particulate matter: 25 tpy of particulate matter emissions

PM₁₀: 15 tpy

PM_{2.5}: 10 tpy of direct PM_{2.5} emissions; 40 tpy of sulfur dioxide emissions; 40 tpy of nitrogen oxide emissions unless demonstrated not to be a PM_{2.5} precursor under paragraph (b)(50) of this section

Ozone: 40 tpy of volatile organic compounds or nitrogen oxides

Lead: 0.6 tpy

Fluorides: 3 tpy

Sulfuric acid mist: 7 tpy

Hydrogen sulfide (H₂S): 10 tpy

Total reduced sulfur (including H₂S): 10 tpy

Reduced sulfur compounds (including H₂S): 10 tpy

Municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans): 3.2×10^{-6} megagrams per year (3.5×10^{-6} tons per year)

Municipal waste combustor metals (measured as particulate matter): 14 megagrams per year (15 tons per year)

Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride): 36 megagrams per year (40 tons per year)

Municipal solid waste landfills emissions (measured as nonmethane organic compounds): 45 megagrams per year (50 tons per year)

(ii) *Significant* means, in reference to a net emissions increase or the potential of a source to emit a regulated NSR pollutant that paragraph (b)(23)(i) of this section, does not list, any emissions rate.

(iii) Notwithstanding paragraph (b)(23)(i) of this section, *significant* means any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than $1 \mu\text{g}/\text{m}^3$, (24-hour average).

(24) *Federal Land Manager* means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.

(25) *High terrain* means any area having an elevation 900 feet or more above the base of the stack of a source.

(26) *Low terrain* means any area other than high terrain.

(27) *Indian Reservation* means any federally recognized reservation established by Treaty, Agreement, executive order, or act of Congress.

(28) *Indian Governing Body* means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self government.

(29) *Adverse impact on visibility* means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the Federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairment, and how these factors correlate with (1) times of visitor use of the Federal Class I area, and (2) the frequency and timing of natural conditions that reduce visibility.

(30) *Volatile organic compounds (VOC)* is as defined in §51.100(s) of this chapter.

(31) *Electric utility steam generating unit* means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

(32) [Reserved]

(33) *Replacement unit* means an emissions unit for which all the criteria listed in paragraphs (b)(33)(i) through (iv) of this section are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.

(i) The emissions unit is a reconstructed unit within the meaning of §60.15(b)(1) of this chapter, or the emissions unit completely takes the place of an existing emissions unit.

(ii) The emissions unit is identical to or functionally equivalent to the replaced emissions unit.

(iii) The replacement does not alter the basic design parameters (as discussed in paragraph (cc)(2) of this section) of the process unit.

(iv) The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

(34) *Clean coal technology* means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

(35) *Clean coal technology demonstration project* means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology", up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency. The Federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.

(36) *Temporary clean coal technology demonstration project* means a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State implementation plans for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(37) (i) *Repowering* means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

(ii) Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

(iii) The Administrator shall give expedited consideration to permit applications for any source that satisfies the requirements of this subsection and is granted an extension under section 409 of the Clean Air Act.

(38) *Reactivation of a very clean coal-fired electric utility steam generating unit* means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

(i) Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment;

(ii) Was equipped prior to shut-down with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;

(iii) Is equipped with low-NO_x burners prior to the time of commencement of operations following reactivation; and

(iv) Is otherwise in compliance with the requirements of the Clean Air Act.

(39) *Pollution prevention* means any activity that through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants (including fugitive emissions) and other pollutants to the environment prior to recycling, treatment, or disposal; it does not mean recycling (other than certain "in-process recycling" practices), energy recovery, treatment, or disposal.

(40) *Significant emissions increase* means, for a regulated NSR pollutant, an increase in emissions that is significant (as defined in paragraph (b)(23) of this section) for that pollutant.

(41)(i) *Projected actual emissions* means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source.

(ii) In determining the projected actual emissions under paragraph (b)(41)(i) of this section (before beginning actual construction), the owner or operator of the major stationary source:

(a) Shall consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the State or Federal regulatory authorities, and compliance plans under the approved State Implementation Plan; and

(b) Shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions; and

(c) Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during

the consecutive 24-month period used to establish the baseline actual emissions under paragraph (b)(48) of this section and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or

(d) In lieu of using the method set out in paragraphs (a)(41)(ii)(a) through (c) of this section, may elect to use the emissions unit's potential to emit, in tons per year, as defined under paragraph (b)(4) of this section.

(42) [Reserved]

(43) *Prevention of Significant Deterioration (PSD) program* means the EPA-implemented major source preconstruction permit programs under this section or a major source preconstruction permit program that has been approved by the Administrator and incorporated into the State Implementation Plan pursuant to §51.166 of this chapter to implement the requirements of that section. Any permit issued under such a program is a major NSR permit.

(44) *Continuous emissions monitoring system (CEMS)* means all of the equipment that may be required to meet the data acquisition and availability requirements of this section, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.

(45) *Predictive emissions monitoring system (PEMS)* means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis.

(46) *Continuous parameter monitoring system (CPMS)* means all of the equipment necessary to meet the data acquisition and availability requirements of this section, to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and to record average operational parameter value(s) on a continuous basis.

(47) *Continuous emissions rate monitoring system (CERMS)* means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).

(48) *Baseline actual emissions* means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with paragraphs (b)(48)(i) through (iv) of this section.

(i) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The Administrator shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

(a) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(b) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.

(c) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions

units being changed. A different consecutive 24-month period can be used For each regulated NSR pollutant.

(d) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraph (b)(48)(i)(b) of this section.

(ii) For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the Administrator for a permit required under this section or by the reviewing authority for a permit required by a plan, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990.

(a) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(b) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

(c) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under part 63 of this chapter, the baseline actual emissions need only be adjusted if the State has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of §51.165(a)(3)(ii)(G) of this chapter.

(d) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period can be used For each regulated NSR pollutant.

(e) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraphs (b)(48)(ii)(b) and (c) of this section.

(iii) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.

(iv) For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in paragraph (b)(48)(i) of this section, for other existing emissions units in accordance with the procedures contained in paragraph (b)(48)(ii) of this section, and for a new emissions unit in accordance with the procedures contained in paragraph (b)(48)(iii) of this section.

(49) *Subject to regulation* means, for any air pollutant, that the pollutant is subject to either a provision in the Clean Air Act, or a nationally-applicable regulation codified by the Administrator in subchapter C of this chapter, that requires actual control of the quantity of emissions of that pollutant, and

that such a control requirement has taken effect and is operative to control, limit or restrict the quantity of emissions of that pollutant released from the regulated activity. Except that:

(i) *Greenhouse gases (GHGs)*, the air pollutant defined in §86.1818-12(a) of this chapter as the aggregate group of six greenhouse gases: Carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, shall not be subject to regulation except as provided in paragraphs (b)(49)(iv) through (v) of this section and shall not be subject to regulation if the stationary source maintains its total source-wide emissions below the GHG PAL level, meets the requirements in paragraphs (aa)(1) through (15) of this section, and complies with the PAL permit containing the GHG PAL.

(ii) For purposes of paragraphs (b)(49)(iii) through (v) of this section, the term tpy *CO₂ equivalent emissions (CO₂e)* shall represent an amount of GHGs emitted, and shall be computed as follows:

(a) Multiplying the mass amount of emissions (tpy), for each of the six greenhouse gases in the pollutant GHGs, by the gas's associated global warming potential published at Table A-1 to subpart A of part 98 of this chapter—Global Warming Potentials. For purposes of this paragraph, prior to July 21, 2014, the mass of the greenhouse gas carbon dioxide shall not include carbon dioxide emissions resulting from the combustion or decomposition of non-fossilized and biodegradable organic material originating from plants, animals, or micro-organisms (including products, by-products, residues and waste from agriculture, forestry and related industries as well as the non-fossilized and biodegradable organic fractions of industrial and municipal wastes, including gases and liquids recovered from the decomposition of non-fossilized and biodegradable organic material).

(b) Sum the resultant value from paragraph (b)(49)(ii)(a) of this section for each gas to compute a tpy CO₂e.

(iii) The term *emissions increase* as used in paragraphs (b)(49)(iv) through (v) of this section shall mean that both a significant emissions increase (as calculated using the procedures in paragraph (a)(2)(iv) of this section) and a significant net emissions increase (as defined in paragraphs (b)(3) and (b)(23) of this section) occur. For the pollutant GHGs, an emissions increase shall be based on tpy CO₂e, and shall be calculated assuming the pollutant GHGs is a regulated NSR pollutant, and “significant” is defined as 75,000 tpy CO₂e instead of applying the value in paragraph (b)(23)(ii) of this section.

(iv) Beginning January 2, 2011, the pollutant GHGs is subject to regulation if:

(a) The stationary source is a new major stationary source for a regulated NSR pollutant that is not GHGs, and also will emit or will have the potential to emit 75,000 tpy CO₂e or more; or

(b) The stationary source is an existing major stationary source for a regulated NSR pollutant that is not GHGs, and also will have an emissions increase of a regulated NSR pollutant, and an emissions increase of 75,000 tpy CO₂e or more; and,

(50) *Regulated NSR pollutant*, for purposes of this section, means the following:

(i) Any pollutant for which a national ambient air quality standard has been promulgated. This includes, but is not limited to, the following:

(a) PM_{2.5} emissions and PM₁₀ emissions shall include gaseous emissions from a source or activity, which condense to form particulate matter at ambient temperatures. On or after January 1, 2011, such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for PM_{2.5} and PM₁₀ in PSD permits. Compliance with emissions limitations for PM_{2.5} and PM₁₀ issued prior to this date shall not be based on condensable particulate matter unless

required by the terms and conditions of the permit or the applicable implementation plan. Applicability determinations made prior to this date without accounting for condensable particulate matter shall not be considered in violation of this section unless the applicable implementation plan required condensable particulate matter to be included.

(b) Any pollutant identified under this paragraph (b)(50)(i)(b) as a constituent or precursor for a pollutant for which a national ambient air quality standard has been promulgated. Precursors identified by the Administrator for purposes of NSR are the following:

(1) Volatile organic compounds and nitrogen oxides are precursors to ozone in all attainment and unclassifiable areas.

(2) Sulfur dioxide is a precursor to $PM_{2.5}$ in all attainment and unclassifiable areas.

(3) Nitrogen oxides are presumed to be precursors to $PM_{2.5}$ in all attainment and unclassifiable areas, unless the State demonstrates to the Administrator's satisfaction or EPA demonstrates that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to that area's ambient $PM_{2.5}$ concentrations.

(4) Volatile organic compounds are presumed not to be precursors to $PM_{2.5}$ in any attainment or unclassifiable area, unless the State demonstrates to the Administrator's satisfaction or EPA demonstrates that emissions of volatile organic compounds from sources in a specific area are a significant contributor to that area's ambient $PM_{2.5}$ concentrations.

(ii) Any pollutant that is subject to any standard promulgated under section 111 of the Act;

(iii) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act;

(iv) Any pollutant that otherwise is subject to regulation under the Act as defined in paragraph (b)(49) of this section.

(v) Notwithstanding paragraphs (b)(50)(i) through (iv) of this section, the term *regulated NSR pollutant* shall not include any or all hazardous air pollutants either listed in section 112 of the Act, or added to the list pursuant to section 112(b)(2) of the Act, and which have not been delisted pursuant to section 112(b)(3) of the Act, unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Act.

(51) *Reviewing authority* means the State air pollution control agency, local agency, other State agency, Indian tribe, or other agency authorized by the Administrator to carry out a permit program under §51.165 and §51.166 of this chapter, or the Administrator in the case of EPA-implemented permit programs under this section.

(52) *Project* means a physical change in, or change in the method of operation of, an existing major stationary source.

(53) *Lowest achievable emission rate (LAER)* is as defined in §51.165(a)(1)(xiii) of this chapter.

(54) *Reasonably available control technology (RACT)* is as defined in §51.100(o) of this chapter.

(55)(i) In general, *process unit* means any collection of structures and/or equipment that processes, assembles, applies, blends, or otherwise uses material inputs to produce or store an intermediate or a

completed product. A single stationary source may contain more than one process unit, and a process unit may contain more than one emissions unit.

(ii) Pollution control equipment is not part of the process unit, unless it serves a dual function as both process and control equipment. Administrative and warehousing facilities are not part of the process unit.

(iii) For replacement cost purposes, components shared between two or more process units are proportionately allocated based on capacity.

(iv) The following list identifies the process units at specific categories of stationary sources.

(a) For a steam electric generating facility, the process unit consists of those portions of the plant that contribute directly to the production of electricity. For example, at a pulverized coal-fired facility, the process unit would generally be the combination of those systems from the coal receiving equipment through the emission stack (excluding post-combustion pollution controls), including the coal handling equipment, pulverizers or coal crushers, feedwater heaters, ash handling, boiler, burners, turbine-generator set, condenser, cooling tower, water treatment system, air preheaters, and operating control systems. Each separate generating unit is a separate process unit.

(b) For a petroleum refinery, there are several categories of process units: those that separate and/or distill petroleum feedstocks; those that change molecular structures; petroleum treating processes; auxiliary facilities, such as steam generators and hydrogen production units; and those that load, unload, blend or store intermediate or completed products.

(c) For an incinerator, the process unit would consist of components from the feed pit or refuse pit to the stack, including conveyors, combustion devices, heat exchangers and steam generators, quench tanks, and fans.

NOTE TO PARAGRAPH (b)(55): By a court order on December 24, 2003, this paragraph (b)(55) is stayed indefinitely. The stayed provisions will become effective immediately if the court terminates the stay. At that time, EPA will publish a document in the FEDERAL REGISTER advising the public of the termination of the stay.

(56) *Functionally equivalent component* means a component that serves the same purpose as the replaced component.

NOTE TO PARAGRAPH (b)(56): By a court order on December 24, 2003, this paragraph (b)(56) is stayed indefinitely. The stayed provisions will become effective immediately if the court terminates the stay. At that time, EPA will publish a document in the FEDERAL REGISTER advising the public of the termination of the stay.

(57) *Fixed capital cost* means the capital needed to provide all the depreciable components. "Depreciable components" refers to all components of fixed capital cost and is calculated by subtracting land and working capital from the total capital investment, as defined in paragraph (b)(58) of this section.

NOTE TO PARAGRAPH (b)(57): By a court order on December 24, 2003, this paragraph (b)(57) is stayed indefinitely. The stayed provisions will become effective immediately if the court terminates the stay. At that time, EPA will publish a document in the FEDERAL REGISTER advising the public of the termination of the stay.

(58) *Total capital investment* means the sum of the following: all costs required to purchase needed process equipment (purchased equipment costs); the costs of labor and materials for installing that equipment (direct installation costs); the costs of site preparation and buildings; other costs such as engineering, construction and field expenses, fees to contractors, startup and performance tests, and contingencies (indirect installation costs); land for the process equipment; and working capital for the process equipment.

NOTE TO PARAGRAPH (b)(58): By a court order on December 24, 2003, this paragraph (b)(58) is stayed indefinitely. The stayed provisions will become effective immediately if the court terminates the stay. At that time, EPA will publish a document in the FEDERAL REGISTER advising the public of the termination of the stay.

(c) *Ambient air increments.* In areas designated as Class I, II or III, increases in pollutant concentration over the baseline concentration shall be limited to the following:

Pollutant	Maximum allowable increase (micrograms per cubic meter)
Class I Area	
PM _{2.5} :	
Annual arithmetic mean	1
24-hr maximum	2
PM ₁₀ :	
Annual arithmetic mean	4
24-hr maximum	8
Sulfur dioxide:	
Annual arithmetic mean	2
24-hr maximum	5
3-hr maximum	25
Nitrogen dioxide:	
Annual arithmetic mean	2.5
Class II Area	
PM _{2.5} :	
Annual arithmetic mean	4
24-hr maximum	9
PM ₁₀ :	
Annual arithmetic mean	17
24-hr maximum	30
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	512

Nitrogen dioxide:	
Annual arithmetic mean	25
Class III Area	
PM _{2.5} :	
Annual arithmetic mean	8
24-hr maximum	18
PM ₁₀ :	
Annual arithmetic mean	34
24-hr maximum	60
Sulfur dioxide:	
Annual arithmetic mean	40
24-hr maximum	182
3-hr maximum	700
Nitrogen dioxide:	
Annual arithmetic mean	50

For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

(d) *Ambient air ceilings.* No concentration of a pollutant shall exceed:

- (1) The concentration permitted under the national secondary ambient air quality standard, or
- (2) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

(e) *Restrictions on area classifications.* (1) All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:

- (i) International parks,
- (ii) National wilderness areas which exceed 5,000 acres in size,
- (iii) National memorial parks which exceed 5,000 acres in size, and
- (iv) National parks which exceed 6,000 acres in size.

(2) Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this section.

(3) Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this section.

(4) The following areas may be redesignated only as Class I or II:

(i) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and

(ii) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

(f) [Reserved]

(g) *Redesignation.* (1) All areas (except as otherwise provided under paragraph (e) of this section) are designated Class II as of December 5, 1974. Redesignation (except as otherwise precluded by paragraph (e) of this section) may be proposed by the respective States or Indian Governing Bodies, as provided below, subject to approval by the Administrator as a revision to the applicable State implementation plan.

(2) The State may submit to the Administrator a proposal to redesignate areas of the State Class I or Class II provided that:

(i) At least one public hearing has been held in accordance with procedures established in §51.102 of this chapter;

(ii) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing;

(iii) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;

(iv) Prior to the issuance of notice respecting the redesignation of an area that includes any Federal lands, the State has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity (not in excess of 60 days) to confer with the State respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, the State shall have published a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the Federal Land Manager); and

(v) The State has proposed the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

(3) Any area other than an area to which paragraph (e) of this section refers may be redesignated as Class III if—

(i) The redesignation would meet the requirements of paragraph (g)(2) of this section;

(ii) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor of the State, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session (unless State law provides that the redesignation must be specifically approved by State legislation) and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation or pass resolutions concurring in the redesignation:

(iii) The redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard; and

(iv) Any permit application for any major stationary source or major modification, subject to review under paragraph (l) of this section, which could receive a permit under this section only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.

(4) Lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. The appropriate Indian Governing Body may submit to the Administrator a proposal to redesignate areas Class I, Class II, or Class III: *Provided, That:*

(i) The Indian Governing Body has followed procedures equivalent to those required of a State under paragraphs (g)(2), (g)(3)(iii), and (g)(3)(iv) of this section; and

(ii) Such redesignation is proposed after consultation with the State(s) in which the Indian Reservation is located and which border the Indian Reservation.

(5) The Administrator shall disapprove, within 90 days of submission, a proposed redesignation of any area only if he finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this paragraph or is inconsistent with paragraph (e) of this section. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.

(6) If the Administrator disapproves any proposed redesignation, the State or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the Administrator.

(h) *Stack heights.* (1) The degree of emission limitation required for control of any air pollutant under this section shall not be affected in any manner by—

(i) So much of the stack height of any source as exceeds good engineering practice, or

(ii) Any other dispersion technique.

(2) Paragraph (h)(1) of this section shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

(i) *Exemptions.* (1) The requirements of paragraphs (j) through (r) of this section shall not apply to a particular major stationary source or major modification, if;

(i) Construction commenced on the source or modification before August 7, 1977. The regulations at 40 CFR 52.21 as in effect before August 7, 1977, shall govern the review and permitting of any such source or modification; or

(ii) The source or modification was subject to the review requirements of 40 CFR 52.21(d)(1) as in effect before March 1, 1978, and the owner or operator:

(a) Obtained under 40 CFR 52.21 a final approval effective before March 1, 1978;

(b) Commenced construction before March 19, 1979; and

(c) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or

(iii) The source or modification was subject to 40 CFR 52.21 as in effect before March 1, 1978, and the review of an application for approval for the stationary source or modification under 40 CFR 52.21 would have been completed by March 1, 1978, but for an extension of the public comment period pursuant to a request for such an extension. In such a case, the application shall continue to be processed, and granted or denied, under 40 CFR 52.21 as in effect prior to March 1, 1978; or

(iv) The source or modification was not subject to 40 CFR 52.21 as in effect before March 1, 1978, and the owner or operator:

(a) Obtained all final Federal, state and local preconstruction approvals or permits necessary under the applicable State Implementation Plan before March 1, 1978;

(b) Commenced construction before March 19, 1979; and

(c) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or

(v) The source or modification was not subject to 40 CFR 52.21 as in effect on June 19, 1978 or under the partial stay of regulations published on February 5, 1980 (45 FR 7800), and the owner or operator:

(a) Obtained all final Federal, state and local preconstruction approvals or permits necessary under the applicable State Implementation Plan before August 7, 1980;

(b) Commenced construction within 18 months from August 7, 1980, or any earlier time required under the applicable State Implementation Plan; and

(c) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time; or

(vi) The source or modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at such an institution, and the governor of the state in which the source or modification would be located requests that it be exempt from those requirements; or

(vii) The source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:

(a) Coal cleaning plants (with thermal dryers);

(b) Kraft pulp mills;

- (c) Portland cement plants;
- (d) Primary zinc smelters;
- (e) Iron and steel mills;
- (f) Primary aluminum ore reduction plants;
- (g) Primary copper smelters;
- (h) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- (i) Hydrofluoric, sulfuric, or nitric acid plants;
- (j) Petroleum refineries;
- (k) Lime plants;
- (l) Phosphate rock processing plants;
- (m) Coke oven batteries;
- (n) Sulfur recovery plants;
- (o) Carbon black plants (furnace process);
- (p) Primary lead smelters;
- (q) Fuel conversion plants;
- (r) Sintering plants;
- (s) Secondary metal production plants;
- (t) Chemical process plants—The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;
- (u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
- (v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (w) Taconite ore processing plants;
- (x) Glass fiber processing plants;
- (y) Charcoal production plants;
- (z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;

(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act; or

(viii) The source is a portable stationary source which has previously received a permit under this section, and

(a) The owner or operator proposes to relocate the source and emissions of the source at the new location would be temporary; and

(b) The emissions from the source would not exceed its allowable emissions; and

(c) The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and

(d) Reasonable notice is given to the Administrator prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Such notice shall be given to the Administrator not less than 10 days in advance of the proposed relocation unless a different time duration is previously approved by the Administrator.

(ix) The source or modification was not subject to §52.21, with respect to particulate matter, as in effect before July 31, 1987, and the owner or operator:

(a) Obtained all final Federal, State, and local preconstruction approvals or permits necessary under the applicable State implementation plan before July 31, 1987;

(b) Commenced construction within 18 months after July 31, 1987, or any earlier time required under the State implementation plan; and

(c) Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable period of time.

(x) The source or modification was subject to 40 CFR 52.21, with respect to particulate matter, as in effect before July 31, 1987 and the owner or operator submitted an application for a permit under this section before that date, and the Administrator subsequently determines that the application as submitted was complete with respect to the particular matter requirements then in effect in the section. Instead, the requirements of paragraphs (j) through (r) of this section that were in effect before July 31, 1987 shall apply to such source or modification.

(2) The requirements of paragraphs (j) through (r) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or modification is located in an area designated as nonattainment under section 107 of the Act. Nonattainment designations for revoked NAAQS, as contained in 40 CFR part 81, shall not be viewed as current designations under section 107 of the Act for purposes of determining the applicability of paragraphs (j) through (r) of this section to a major stationary source or major modification after the revocation of that NAAQS is effective.

(3) The requirements of paragraphs (k), (m) and (o) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from the source, or the net emissions increase of that pollutant from the modification:

(i) Would impact no Class I area and no area where an applicable increment is known to be violated, and

(ii) Would be temporary.

(4) The requirements of paragraphs (k), (m) and (o) of this section as they relate to any maximum allowable increase for a Class II area shall not apply to a major modification at a stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each regulated NSR pollutant from the modification after the application of best available control technology would be less than 50 tons per year.

(5) The Administrator may exempt a stationary source or modification from the requirements of paragraph (m) of this section, with respect to monitoring for a particular pollutant if:

(i) The emissions increase of the pollutant from the new source or the net emissions increase of the pollutant from the modification would cause, in any area, air quality impacts less than the following amounts:

(a) Carbon monoxide—575 $\mu\text{g}/\text{m}^3$, 8-hour average;

(b) Nitrogen dioxide—14 $\mu\text{g}/\text{m}^3$, annual average;

(c) $\text{PM}_{2.5}$ —0 $\mu\text{g}/\text{m}^3$;

(c) Note to paragraph (i)(5)(i)(c): In accordance with *Sierra Club v. EPA*, 706 F.3d 428 (DC Cir. 2013), no exemption is available with regard to $\text{PM}_{2.5}$.

(d) PM_{10} —10 $\mu\text{g}/\text{m}^3$, 24-hour average;

(e) Sulfur dioxide—13 $\mu\text{g}/\text{m}^3$, 24-hour average;

(f) Ozone;

(g) Lead—0.1 $\mu\text{g}/\text{m}^3$, 3-month average;

(h) Fluorides—0.25 $\mu\text{g}/\text{m}^3$, 24-hour average;

(i) Total reduced sulfur—10 $\mu\text{g}/\text{m}^3$, 1-hour average;

(j) Hydrogen sulfide—0.2 $\mu\text{g}/\text{m}^3$, 1-hour average;

(k) Reduced sulfur compounds—10 $\mu\text{g}/\text{m}^3$, 1-hour average; or

NOTE TO PARAGRAPH (c)(5)(i)(f): No *de minimis* air quality level is provided for ozone. However, any net emissions increase of 100 tons per year or more of volatile organic compounds or nitrogen oxides subject to PSD would be required to perform an ambient impact analysis, including the gathering of ambient air quality data.

(ii) The concentrations of the pollutant in the area that the source or modification would affect are less than the concentrations listed in paragraph (i)(5)(i) of this section; or

(iii) The pollutant is not listed in paragraph (i)(5)(i) of this section.

(6) The requirements for best available control technology in paragraph (j) of this section and the requirements for air quality analyses in paragraph (m)(1) of this section, shall not apply to a particular stationary source or modification that was subject to 40 CFR 52.21 as in effect on June 19, 1978, if the

owner or operator of the source or modification submitted an application for a permit under those regulations before August 7, 1980, and the Administrator subsequently determines that the application as submitted before that date was complete. Instead, the requirements at 40 CFR 52.21(j) and (n) as in effect on June 19, 1978 apply to any such source or modification.

(7)(i) The requirements for air quality monitoring in paragraphs (m)(1) (ii) through (iv) of this section shall not apply to a particular source or modification that was subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submits an application for a permit under this section on or before June 8, 1981, and the Administrator subsequently determines that the application as submitted before that date was complete with respect to the requirements of this section other than those in paragraphs (m)(1) (ii) through (iv) of this section, and with respect to the requirements for such analyses at 40 CFR 52.21(m)(2) as in effect on June 19, 1978. Instead, the latter requirements shall apply to any such source or modification.

(ii) The requirements for air quality monitoring in paragraphs (m)(1) (ii) through (iv) of this section shall not apply to a particular source or modification that was not subject to 40 CFR 52.21 as in effect on June 19, 1978, if the owner or operator of the source or modification submits an application for a permit under this section on or before June 8, 1981, and the Administrator subsequently determines that the application as submitted before that date was complete, except with respect to the requirements in paragraphs (m)(1) (ii) through (iv).

(8)(i) At the discretion of the Administrator, the requirements for air quality monitoring of PM₁₀ in paragraphs (m)(1) (i)-(iv) of this section may not apply to a particular source or modification when the owner or operator of the source or modification submits an application for a permit under this section on or before June 1, 1988 and the Administrator subsequently determines that the application as submitted before that date was complete, except with respect to the requirements for monitoring particulate matter in paragraphs (m)(1) (i)-(iv).

(ii) The requirements for air quality monitoring of PM₁₀ in paragraphs (m)(1), (ii) and (iv) and (m)(3) of this section shall apply to a particular source or modification if the owner or operator of the source or modification submits an application for a permit under this section after June 1, 1988 and no later than December 1, 1988. The data shall have been gathered over at least the period from February 1, 1988 to the date the application becomes otherwise complete in accordance with the provisions set forth under paragraph (m)(1)(viii) of this section, except that if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than 4 months), the data that paragraph (m)(1)(iii) requires shall have been gathered over a shorter period.

(9) The requirements of paragraph (k)(1)(ii) of this section shall not apply to a stationary source or modification with respect to any maximum allowable increase for nitrogen oxides if the owner or operator of the source or modification submitted an application for a permit under this section before the provisions embodying the maximum allowable increase took effect as part of the applicable implementation plan and the Administrator subsequently determined that the application as submitted before that date was complete.

(10) The requirements in paragraph (k)(1)(ii) of this section shall not apply to a stationary source or modification with respect to any maximum allowable increase for PM-10 if (i) the owner or operator of the source or modification submitted an application for a permit under this section before the provisions embodying the maximum allowable increases for PM-10 took effect in an implementation plan to which this section applies, and (ii) the Administrator subsequently determined that the application as submitted before that date was otherwise complete. Instead, the requirements in paragraph (k)(1)(ii) shall apply with respect to the maximum allowable increases for TSP as in effect on the date the application was submitted.

(11) The requirements of paragraph (k)(1) of this section shall not apply to a stationary source or modification with respect to the national ambient air quality standards for PM_{2.5} in effect on March 18, 2013 if:

(i) The Administrator has determined a permit application subject to this section to be complete on or before December 14, 2012. Instead, the requirements in paragraph (k)(1) of this section shall apply with respect to the national ambient air quality standards for PM_{2.5} in effect at the time the Administrator determined the permit application to be complete; or

(ii) The Administrator has first published before March 18, 2013 a public notice that a draft permit subject to this section has been prepared. Instead, the requirements in paragraph (k)(1) of this section shall apply with respect to the national ambient air quality standards for PM_{2.5} in effect on the date the Administrator first published a public notice that a draft permit has been prepared.

(12) The requirements of paragraph (k)(1) of this section shall not apply to a permit application for a stationary source or modification with respect to the revised national ambient air quality standards for ozone published on October 26, 2015 if:

(i) The Administrator has determined the permit application subject to this section to be complete on or before October 1, 2015. Instead, the requirements in paragraph (k)(1) of this section shall apply with respect to the national ambient air quality standards for ozone in effect at the time the Administrator determined the permit application to be complete; or

(ii) The Administrator has first published before December 28, 2015 a public notice of a preliminary determination or draft permit for the permit application subject to this section. Instead, the requirements in paragraph (k)(1) of this section shall apply with respect to the national ambient air quality standards for ozone in effect on the date the Administrator first published a public notice of a preliminary determination or draft permit.

(j) *Control technology review.* (1) A major stationary source or major modification shall meet each applicable emissions limitation under the State Implementation Plan and each applicable emissions standard and standard of performance under 40 CFR parts 60 and 61.

(2) A new major stationary source shall apply best available control technology for each regulated NSR pollutant that it would have the potential to emit in significant amounts.

(3) A major modification shall apply best available control technology for each regulated NSR pollutant for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.

(4) For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source.

(k) *Source impact analysis—(1) Required demonstration.* The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation of:

(i) Any national ambient air quality standard in any air quality control region; or

(ii) Any applicable maximum allowable increase over the baseline concentration in any area.

(2) [Reserved]

(l) *Air quality models.* (1) All estimates of ambient concentrations required under this paragraph shall be based on applicable air quality models, data bases, and other requirements specified in appendix W of part 51 of this chapter (Guideline on Air Quality Models).

(2) Where an air quality model specified in appendix W of part 51 of this chapter (Guideline on Air Quality Models) is inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis for a specific state program. Written approval of the Administrator must be obtained for any modification or substitution. In addition, use of a modified or substituted model must be subject to notice and opportunity for public comment under procedures developed in accordance with paragraph (q) of this section.

(m) *Air quality analysis—(1) Preapplication analysis.* (i) Any application for a permit under this section shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants:

(a) For the source, each pollutant that it would have the potential to emit in a significant amount;

(b) For the modification, each pollutant for which it would result in a significant net emissions increase.

(ii) With respect to any such pollutant for which no National Ambient Air Quality Standard exists, the analysis shall contain such air quality monitoring data as the Administrator determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.

(iii) With respect to any such pollutant (other than nonmethane hydrocarbons) for which such a standard does exist, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase.

(iv) In general, the continuous air quality monitoring data that is required shall have been gathered over a period of at least one year and shall represent at least the year preceding receipt of the application, except that, if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year (but not to be less than four months), the data that is required shall have been gathered over at least that shorter period.

(v) For any application which becomes complete, except as to the requirements of paragraphs (m)(1)(iii) and (iv) of this section, between June 8, 1981, and February 9, 1982, the data that paragraph (m)(1)(iii) of this section, requires shall have been gathered over at least the period from February 9, 1981, to the date the application becomes otherwise complete, except that:

(a) If the source or modification would have been major for that pollutant under 40 CFR 52.21 as in effect on June 19, 1978, any monitoring data shall have been gathered over at least the period required by those regulations.

(b) If the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four months), the data that paragraph (m)(1)(iii) of this section, requires shall have been gathered over at least that shorter period.

(c) If the monitoring data would relate exclusively to ozone and would not have been required under 40 CFR 52.21 as in effect on June 19, 1978, the Administrator may waive the otherwise applicable requirements of this paragraph (v) to the extent that the applicant shows that the monitoring data would be unrepresentative of air quality over a full year.

(vi) The owner or operator of a proposed stationary source or modification of volatile organic compounds who satisfies all conditions of 40 CFR part 51 Appendix S, section IV may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as required under paragraph (m)(1) of this section.

(vii) For any application that becomes complete, except as to the requirements of paragraphs (m)(1)(iii) and (iv) pertaining to PM_{10} , after December 1, 1988 and no later than August 1, 1989 the data that paragraph (m)(1)(iii) requires shall have been gathered over at least the period from August 1, 1988 to the date the application becomes otherwise complete, except that if the Administrator determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than 4 months), the data that paragraph (m)(1)(iii) requires shall have been gathered over that shorter period.

(viii) With respect to any requirements for air quality monitoring of PM_{10} under paragraphs (i)(11) (i) and (ii) of this section the owner or operator of the source or modification shall use a monitoring method approved by the Administrator and shall estimate the ambient concentrations of PM_{10} using the data collected by such approved monitoring method in accordance with estimating procedures approved by the Administrator.

(2) Post-construction monitoring. The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or modification, conduct such ambient monitoring as the Administrator determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.

(3) Operations of monitoring stations. The owner or operator of a major stationary source or major modification shall meet the requirements of Appendix B to part 58 of this chapter during the operation of monitoring stations for purposes of satisfying paragraph (m) of this section.

(n) *Source information.* The owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under this section.

(1) With respect to a source or modification to which paragraphs (j), (l), (n) and (p) of this section apply, such information shall include:

(i) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

(ii) A detailed schedule for construction of the source or modification;

(iii) A detailed description as to what system of continuous emission reduction is planned for the source or modification, emission estimates, and any other information necessary to determine that best available control technology would be applied.

(2) Upon request of the Administrator, the owner or operator shall also provide information on:

(i) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and

(ii) The air quality impacts, and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification would affect.

(o) *Additional impact analyses.* (1) The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

(2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

(3) *Visibility monitoring.* The Administrator may require monitoring of visibility in any Federal class I area near the proposed new stationary source for major modification for such purposes and by such means as the Administrator deems necessary and appropriate.

(p) *Sources impacting Federal Class I areas—additional requirements—*(1) *Notice to Federal land managers.* The Administrator shall provide written notice of any permit application for a proposed major stationary source or major modification, the emissions from which may affect a Class I area, to the Federal land manager and the Federal official charged with direct responsibility for management of any lands within any such area. Such notification shall include a copy of all information relevant to the permit application and shall be given within 30 days of receipt and at least 60 days prior to any public hearing on the application for a permit to construct. Such notification shall include an analysis of the proposed source's anticipated impacts on visibility in the Federal Class I area. The Administrator shall also provide the Federal land manager and such Federal officials with a copy of the preliminary determination required under paragraph (q) of this section, and shall make available to them any materials used in making that determination, promptly after the Administrator makes such determination. Finally, the Administrator shall also notify all affected Federal land managers within 30 days of receipt of any advance notification of any such permit application.

(2) *Federal Land Manager.* The Federal Land Manager and the Federal official charged with direct responsibility for management of such lands have an affirmative responsibility to protect the air quality related values (including visibility) of such lands and to consider, in consultation with the Administrator, whether a proposed source or modification will have an adverse impact on such values.

(3) *Visibility analysis.* The Administrator shall consider any analysis performed by the Federal land manager, provided within 30 days of the notification required by paragraph (p)(1) of this section, that shows that a proposed new major stationary source or major modification may have an adverse impact on visibility in any Federal Class I area. Where the Administrator finds that such an analysis does not demonstrate to the satisfaction of the Administrator that an adverse impact on visibility will result in the Federal Class I area, the Administrator must, in the notice of public hearing on the permit application, either explain his decision or give notice as to where the explanation can be obtained.

(4) *Denial—impact on air quality related values.* The Federal Land Manager of any such lands may demonstrate to the Administrator that the emissions from a proposed source or modification would have an adverse impact on the air quality-related values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Administrator concurs with such demonstration, then he shall not issue the permit.

(5) *Class I variances.* The owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source or modification would have no adverse

impact on the air quality related values of any such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Federal land manager concurs with such demonstration and he so certifies, the State may authorize the Administrator: *Provided*, That the applicable requirements of this section are otherwise met, to issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide, PM_{2.5}, PM₁₀, and nitrogen oxides would not exceed the following maximum allowable increases over minor source baseline concentration for such pollutants:

Pollutant	Maximum allowable increase (micrograms per cubic meter)
PM _{2.5} :	
Annual arithmetic mean	4
24-hr maximum	9
PM ₁₀ :	
Annual arithmetic mean	17
24-hr maximum	30
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	325
Nitrogen dioxide:	
Annual arithmetic mean	25

(6) *Sulfur dioxide variance by Governor with Federal Land Manager's concurrence.* The owner or operator of a proposed source or modification which cannot be approved under paragraph (q)(4) of this section may demonstrate to the Governor that the source cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for a period of twenty-four hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility). The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may, after notice and public hearing, grant a variance from such maximum allowable increase. If such variance is granted, the Administrator shall issue a permit to such source or modification pursuant to the requirements of paragraph (q)(7) of this section: *Provided*, That the applicable requirements of this section are otherwise met.

(7) *Variance by the Governor with the President's concurrence.* In any case where the Governor recommends a variance in which the Federal Land Manager does not concur, the recommendations of the Governor and the Federal Land Manager shall be transmitted to the President. The President may approve the Governor's recommendation if he finds that the variance is in the national interest. If the variance is approved, the Administrator shall issue a permit pursuant to the requirements of paragraph (q)(7) of this section: *Provided*, That the applicable requirements of this section are otherwise met.

(8) *Emission limitations for Presidential or gubernatorial variance.* In the case of a permit issued pursuant to paragraph (q) (5) or (6) of this section the source or modification shall comply with such emission limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

MAXIMUM ALLOWABLE INCREASE

[Micrograms per cubic meter]

Period of exposure	Terrain areas	
	Low	High
24-hr maximum	36	62
3-hr maximum	130	221

(q) *Public participation.* The Administrator shall follow the applicable procedures of 40 CFR part 124 in processing applications under this section. The Administrator shall follow the procedures at 40 CFR 52.21(r) as in effect on June 19, 1979, to the extent that the procedures of 40 CFR part 124 do not apply.

(r) *Source obligation.* (1) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this section or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this section who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

(2) Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Administrator may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

(3) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State implementation plan and any other requirements under local, State, or Federal law.

(4) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements or paragraphs (j) through (s) of this section shall apply to the source or modification as though construction had not yet commenced on the source or modification.

(5) [Reserved]

(6) Except as otherwise provided in paragraph (r)(6)(vi)(b) of this section, the provisions of this paragraph (r)(6) apply with respect to any regulated NSR pollutant emitted from projects at existing emissions units at a major stationary source (other than projects at a source with a PAL) in circumstances where there is a reasonable possibility, within the meaning of paragraph (r)(6)(vi) of this section, that a project that is not a part of a major modification may result in a significant emissions increase of such pollutant, and the owner or operator elects to use the method specified in paragraphs (b)(41)(ii)(a) through (c) of this section for calculating projected actual emissions.

(i) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

(a) A description of the project;

(b) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

(c) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under paragraph (b)(41)(ii)(c) of this section and an explanation for why such amount was excluded, and any netting calculations, if applicable.

(ii) If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the information set out in paragraph (r)(6)(i) of this section to the Administrator. Nothing in this paragraph (r)(6)(ii) shall be construed to require the owner or operator of such a unit to obtain any determination from the Administrator before beginning actual construction.

(iii) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in paragraph (r)(6)(i)(b) of this section; and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit that regulated NSR pollutant at such emissions unit.

(iv) If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the Administrator within 60 days after the end of each year during which records must be generated under paragraph (r)(6)(iii) of this section setting out the unit's annual emissions during the calendar year that preceded submission of the report.

(v) If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the Administrator if the annual emissions, in tons per year, from the project identified in paragraph (r)(6)(i) of this section, exceed the baseline actual emissions (as documented and maintained pursuant to paragraph (r)(6)(i)(c) of this section), by a significant amount (as defined in paragraph (b)(23) of this section) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph (r)(6)(i)(c) of this section. Such report shall be submitted to the Administrator within 60 days after the end of such year. The report shall contain the following:

(a) The name, address and telephone number of the major stationary source;

(b) The annual emissions as calculated pursuant to paragraph (r)(6)(iii) of this section; and

(c) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).

(vi) A “reasonable possibility” under paragraph (r)(6) of this section occurs when the owner or operator calculates the project to result in either:

(a) A projected actual emissions increase of at least 50 percent of the amount that is a “significant emissions increase,” as defined under paragraph (b)(40) of this section (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant; or

(b) A projected actual emissions increase that, added to the amount of emissions excluded under paragraph (b)(41)(ii)(c) of this section, sums to at least 50 percent of the amount that is a “significant emissions increase,” as defined under paragraph (b)(40) of this section (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant. For a project for which a reasonable possibility occurs only within the meaning of paragraph (r)(6)(vi)(b) of this section, and not also within the meaning of paragraph (r)(6)(vi)(a) of this section, then provisions (r)(6)(ii) through (v) do not apply to the project.

(7) The owner or operator of the source shall make the information required to be documented and maintained pursuant to paragraph (r)(6) of this section available for review upon a request for inspection by the Administrator or the general public pursuant to the requirements contained in §70.4(b)(3)(viii) of this chapter.

(s) *Environmental impact statements.* Whenever any proposed source or modification is subject to action by a Federal Agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321), review by the Administrator conducted pursuant to this section shall be coordinated with the broad environmental reviews under that Act and under section 309 of the Clean Air Act to the maximum extent feasible and reasonable.

(t) *Disputed permits or redesignations.* If any State affected by the redesignation of an area by an Indian Governing Body, or any Indian Governing Body of a tribe affected by the redesignation of an area by a State, disagrees with such redesignation, or if a permit is proposed to be issued for any major stationary source or major modification proposed for construction in any State which the Governor of an affected State or Indian Governing Body of an affected tribe determines will cause or contribute to a cumulative change in air quality in excess of that allowed in this part within the affected State or Indian Reservation, the Governor or Indian Governing Body may request the Administrator to enter into negotiations with the parties involved to resolve such dispute. If requested by any State or Indian Governing Body involved, the Administrator shall make a recommendation to resolve the dispute and protect the air quality related values of the lands involved. If the parties involved do not reach agreement, the Administrator shall resolve the dispute and his determination, or the results of agreements reached through other means, shall become part of the applicable State implementation plan and shall be enforceable as part of such plan. In resolving such disputes relating to area redesignation, the Administrator shall consider the extent to which the lands involved are of sufficient size to allow effective air quality management or have air quality related values of such an area.

(u) *Delegation of authority.* (1) The Administrator shall have the authority to delegate his responsibility for conducting source review pursuant to this section, in accordance with paragraph (u)(2) of this section.

(2) Where the Administrator delegates the responsibility for conducting source review under this section to any agency other than a Regional Office of the Environmental Protection Agency, the following provisions shall apply:

(i) Where the delegate agency is not an air pollution control agency, it shall consult with the appropriate state, tribe, and local air pollution control agency prior to making any determination under this section. Similarly, where the delegate agency does not have continuing responsibility for managing land use, it shall consult with the appropriate state, tribe, and local agency primarily responsible for managing land use prior to making any determination under this section.

(ii) The delegate agency shall send a copy of any public comment notice required under paragraph (r) of this section to the Administrator through the appropriate Regional Office.

(3) In the case of a source or modification which proposes to construct in a class III area, emissions from which would cause or contribute to air quality exceeding the maximum allowable increase applicable if the area were designated a class II area, and where no standard under section 111 of the act has been promulgated for such source category, the Administrator must approve the determination of best available control technology as set forth in the permit.

(v) *Innovative control technology.* (1) An owner or operator of a proposed major stationary source or major modification may request the Administrator in writing no later than the close of the comment period under 40 CFR 124.10 to approve a system of innovative control technology.

(2) The Administrator shall, with the consent of the governor(s) of the affected state(s), determine that the source or modification may employ a system of innovative control technology, if:

(i) The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;

(ii) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under paragraph (j)(2) of this section, by a date specified by the Administrator. Such date shall not be later than 4 years from the time of startup or 7 years from permit issuance;

(iii) The source or modification would meet the requirements of paragraphs (j) and (k) of this section, based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified by the Administrator;

(iv) The source or modification would not before the date specified by the Administrator:

(a) Cause or contribute to a violation of an applicable national ambient air quality standard; or

(b) Impact any area where an applicable increment is known to be violated; and

(v) All other applicable requirements including those for public participation have been met.

(vi) The provisions of paragraph (p) of this section (relating to Class I areas) have been satisfied with respect to all periods during the life of the source or modification.

(3) The Administrator shall withdraw any approval to employ a system of innovative control technology made under this section, if:

(i) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate; or

(ii) The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or

(iii) The Administrator decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.

(4) If a source or modification fails to meet the required level of continuous emission reduction within the specified time period or the approval is withdrawn in accordance with paragraph (v)(3) of this section, the Administrator may allow the source or modification up to an additional 3 years to meet the requirement for the application of best available control technology through use of a demonstrated system of control.

(w) *Permit rescission.* (1) Any permit issued under this section or a prior version of this section shall remain in effect, unless and until it expires under paragraph (s) of this section or is rescinded.

(2) Any owner or operator of a stationary source or modification who holds a permit for the source or modification may request that the Administrator rescind the permit or a particular portion of the permit if the permit for the source or modification was issued:

(i) Under §52.21 as in effect on July 30, 1987 or any earlier version of this section;

(ii) Under §52.21 between July 1, 2011 and July 6, 2015 to a source that was classified as a major stationary source under paragraph (b)(1) of this section solely on the basis of potential emissions of greenhouse gases, which were defined as a regulated NSR pollutant through the application of paragraph (b)(49)(v)(a) of this section as in effect during this time period; or

(iii) Under §52.21 between July 1, 2011 and July 6, 2015 for a modification that was classified as a major modification under paragraph (b)(2) solely on the basis of an increase in emissions of greenhouse gases, which were defined as a regulated NSR pollutant through the application of paragraph (b)(49)(v)(b) of this section as in effect during this time period.

(3) The Administrator shall grant an application for rescission if the application shows that this section would not apply to the source or modification. As a result of a decision of the United States Supreme Court, this section does not apply to sources or modifications that meet only the applicability criteria in paragraph (b)(49)(v) of this section.

(4) If the Administrator rescinds a permit under this paragraph, the public shall be given adequate notice of the rescission. Publication of an announcement of rescission in a newspaper of general circulation in the affected region within 60 days of the rescission shall be considered adequate notice.

(x)-(z) [Reserved]

(aa) *Actuals PALs.* The provisions in paragraphs (aa)(1) through (15) of this section govern actuals PALs.

(1) *Applicability.* (i) The Administrator may approve the use of an actuals PAL, including for GHGs on either a mass basis or a CO₂e basis, for any existing major stationary source or any existing GHG-only source if the PAL meets the requirements in paragraphs (aa)(1) through (15) of this section. The term "PAL" shall mean "actuals PAL" throughout paragraph (aa) of this section.

(ii) Any physical change in or change in the method of operation of a major stationary source or a GHG-only source that maintains its total source-wide emissions below the PAL level, meets the requirements in paragraphs (aa)(1) through (15) of this section, and complies with the PAL permit:

(a) Is not a major modification for the PAL pollutant;

(b) Does not have to be approved through the PSD program;

(c) Is not subject to the provisions in paragraph (r)(4) of this section (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the major NSR program); and

(d) Does not make GHGs subject to regulation as defined by paragraph (b)(49) of this section.

(iii) Except as provided under paragraph (aa)(1)(ii)(c) of this section, a major stationary source or a GHG-only source shall continue to comply with all applicable Federal or State requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

(2) *Definitions.* For the purposes of this section, the definitions in paragraphs (aa)(2)(i) through (xi) of this section apply. When a term is not defined in these paragraphs, it shall have the meaning given in paragraph (b) of this section or in the Act.

(i) *Actuals PAL* for a major stationary source means a PAL based on the baseline actual emissions (as defined in paragraph (b)(48) of this section) of all emissions units (as defined in paragraph (b)(7) of this section) at the source, that emit or have the potential to emit the PAL pollutant. For a GHG-only source, *actuals PAL* means a PAL based on the baseline actual emissions (as defined in paragraph (aa)(2)(xiii) of this section) of all emissions units (as defined in paragraph (aa)(2)(xiv) of this section) at the source, that emit or have the potential to emit GHGs.

(ii) *Allowable emissions* means “allowable emissions” as defined in paragraph (b)(16) of this section, except as this definition is modified according to paragraphs (aa)(2)(ii)(a) and (b) of this section.

(a) The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit’s potential to emit.

(b) An emissions unit’s potential to emit shall be determined using the definition in paragraph (b)(4) of this section, except that the words “or enforceable as a practical matter” should be added after “federally enforceable.”

(iii) *Small emissions unit* means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in paragraph (b)(23) of this section or in the Act, whichever is lower. For a GHG PAL issued on a CO₂e basis, *small emissions unit* means an emissions unit that emits or has the potential to emit less than the amount of GHGs on a CO₂e basis defined as “significant” for the purposes of paragraph (b)(49)(iii) of this section at the time the PAL permit is being issued.

(iv) *Major emissions unit* means:

(a) Any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or

(b) Any emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant as defined by the Act for nonattainment areas. For example, in accordance with the definition of major stationary source in section 182(c) of the Act, an emissions unit would be a major emissions unit for VOC if the emissions unit is located in a serious ozone nonattainment area and it emits or has the potential to emit 50 or more tons of VOC per year.

(c) For a GHG PAL issued on a CO₂e basis, any emissions unit that emits or has the potential to emit equal to or greater than the amount of GHGs on a CO₂e basis that would be sufficient for a new source to trigger permitting requirements under paragraph (b)(49) of this section at the time the PAL permit is being issued.

(v) *Plantwide applicability limitation (PAL)* means an emission limitation expressed on a mass basis in tons per year, or expressed in tons per year CO₂e for a CO₂e-based GHG emission limitation, for a pollutant at a major stationary source or GHG-only source, that is enforceable as a practical matter and established source-wide in accordance with paragraphs (aa)(1) through (15) of this section.

(vi) *PAL effective date* generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

(vii) *PAL effective period* means the period beginning with the PAL effective date and ending 10 years later.

(viii) *PAL major modification* means, notwithstanding paragraphs (b)(2), (b)(3), and (b)(49) of this section (the definitions for major modification, net emissions increase, and subject to regulation), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

(ix) *PAL permit* means the major NSR permit, the minor NSR permit, or the State operating permit under a program that is approved into the State Implementation Plan, or the title V permit issued by the Administrator that establishes a PAL for a major stationary source or a GHG-only source.

(x) *PAL pollutant* means the pollutant for which a PAL is established at a major stationary source or a GHG-only source. For a GHG-only source, the only available PAL pollutant is greenhouse gases.

(xi) *Significant emissions unit* means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level (as defined in paragraph (b)(23) of this section or in the Act, whichever is lower) for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit as defined in paragraph (aa)(2)(iv) of this section. For a GHG PAL issued on a CO₂e basis, *significant emissions unit* means any emissions unit that emits or has the potential to emit GHGs on a CO₂e basis in amounts equal to or greater than the amount that would qualify the unit as small emissions unit as defined in paragraph (aa)(2)(iii) of this section, but less than the amount that would qualify the unit as a major emissions unit as defined in paragraph (aa)(2)(iv)(c) of this section.

(xii) *GHG-only source* means any existing stationary source that emits or has the potential to emit GHGs in the amount equal to or greater than the amount of GHGs on a mass basis that would be sufficient for a new source to trigger permitting requirements for GHGs under paragraph (b)(1) of this section and the amount of GHGs on a CO₂e basis that would be sufficient for a new source to trigger permitting requirements for GHGs under paragraph (b)(49) of this section at the time the PAL permit is being issued, but does not emit or have the potential to emit any other non-GHG regulated NSR pollutant at or above the applicable major source threshold. A GHG-only source may only obtain a PAL for GHG emissions under paragraph (aa) of this section.

(xiii) *Baseline actual emissions* for a GHG PAL means the average rate, in tons per year CO₂e or tons per year GHG, as applicable, at which the emissions unit actually emitted GHGs during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the Administrator for a permit required under this section or by the permitting authority for a permit required by a plan, whichever is earlier. For any existing electric utility

steam generating unit, *baseline actual emissions* for a GHG PAL means the average rate, in tons per year CO₂e or tons per year GHG, as applicable, at which the emissions unit actually emitted the GHGs during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding either the date the owner or operator begins actual construction of the project, except that the Administrator shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

(a) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(b) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

(c) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the stationary source must currently comply, had such stationary source been required to comply with such limitations during the consecutive 24-month period.

(d) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual GHG emissions and for adjusting this amount if required by paragraphs (aa)(2)(xiii)(b) and (c) of this section.

(xiv) *Emissions unit* with respect to GHGs means any part of a stationary source that emits or has the potential to emit GHGs. For purposes of this section, there are two types of emissions units as described in the following:

(a) A new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than 2 years from the date such emissions unit first operated.

(b) An existing emissions unit is any emissions unit that does not meet the requirements in paragraph (aa)(2)(xiv)(a) of this section.

(xv) *Minor source* means any stationary source that does not meet the definition of major stationary source in paragraph (b)(1) of this section for any pollutant at the time the PAL is issued.

(3) *Permit application requirements.* As part of a permit application requesting a PAL, the owner or operator of a major stationary source or a GHG-only source shall submit the following information to the Administrator for approval:

(i) A list of all emissions units at the source designated as small, significant or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, Federal or State applicable requirements, emission limitations, or work practices apply to each unit.

(ii) Calculations of the baseline actual emissions (with supporting documentation). Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown, and malfunction.

(iii) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by paragraph (aa)(13)(i) of this section.

(iv) As part of a permit application requesting a GHG PAL, the owner or operator of a major stationary source or a GHG-only source shall submit a statement by the source owner or operator that

clarifies whether the source is an existing major source as defined in paragraph (b)(1)(i)(a) and (b) of this section or a GHG-only source as defined in paragraph (aa)(2)(xii) of this section.

(4) *General requirements for establishing PALs.* (i) The Administrator is allowed to establish a PAL at a major stationary source or a GHG-only source, provided that at a minimum, the requirements in paragraphs (aa)(4)(i)(a) through (g) of this section are met.

(a) The PAL shall impose an annual emission limitation expressed on a mass basis in tons per year, or expressed in tons per year CO₂e, that is enforceable as a practical matter, for the entire major stationary source or GHG-only source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source or GHG-only source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first 11 months from the PAL effective date, the major stationary source or GHG-only source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.

(b) The PAL shall be established in a PAL permit that meets the public participation requirements in paragraph (aa)(5) of this section.

(c) The PAL permit shall contain all the requirements of paragraph (aa)(7) of this section.

(d) The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source or GHG-only source.

(e) Each PAL shall regulate emissions of only one pollutant.

(f) Each PAL shall have a PAL effective period of 10 years.

(g) The owner or operator of the major stationary source or GHG-only source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in paragraphs (aa)(12) through (14) of this section for each emissions unit under the PAL through the PAL effective period.

(ii) At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under §51.165(a)(3)(ii) of this chapter unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.

(5) *Public participation requirements for PALs.* PALs for existing major stationary sources or GHG-only sources shall be established, renewed, or increased through a procedure that is consistent with §§51.160 and 51.161 of this chapter. This includes the requirement that the Administrator provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The Administrator must address all material comments before taking final action on the permit.

(6) *Setting the 10-year actuals PAL level.* (i) Except as provided in paragraph (aa)(6)(ii) and (iii) of this section, the plan shall provide that the actuals PAL level for a major stationary source or a GHG-only source shall be established as the sum of the baseline actual emissions (as defined in paragraph (b)(48) of this section or, for GHGs, paragraph (aa)(2)(xiii) of this section) of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL pollutant under paragraph (b)(23) of this section or under the Act, whichever is lower. When establishing the actuals PAL level, for a PAL pollutant, only one consecutive 24-month period must be used to determine the baseline actual emissions for all existing emissions units. However, a different consecutive 24-month period may

be used for each different PAL pollutant. Emissions associated with units that were permanently shut down after this 24-month period must be subtracted from the PAL level. The reviewing authority shall specify a reduced PAL level(s) (in tons/yr) in the PAL permit to become effective on the future compliance date(s) of any applicable Federal or State regulatory requirement(s) that the reviewing authority is aware of prior to issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm NO_x to a new rule limit of 30 ppm, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such unit(s).

(ii) For newly constructed units (which do not include modifications to existing units) on which actual construction began after the 24-month period, in lieu of adding the baseline actual emissions as specified in paragraph (aa)(6)(i) of this section, the emissions must be added to the PAL level in an amount equal to the potential to emit of the units.

(iii) For CO₂e based GHG PAL, the actuals PAL level shall be established as the sum of the GHGs baseline actual emissions (as defined in paragraph (aa)(2)(xiii) of this section) of GHGs for each emissions unit at the source, plus an amount equal to the amount defined as "significant" on a CO₂e basis for the purposes of paragraph (b)(49)(iii) at the time the PAL permit is being issued. When establishing the actuals PAL level for a CO₂e-based PAL, only one consecutive 24-month period must be used to determine the baseline actual emissions for all existing emissions units. Emissions associated with units that were permanently shut down after this 24-month period must be subtracted from the PAL level. The reviewing authority shall specify a reduced PAL level (in tons per year CO₂e) in the PAL permit to become effective on the future compliance date(s) of any applicable Federal or state regulatory requirement(s) that the reviewing authority is aware of prior to issuance of the PAL permit.

(7) *Contents of the PAL permit.* The PAL permit must contain, at a minimum, the information in paragraphs (aa)(7)(i) through (xi) of this section.

(i) The PAL pollutant and the applicable source-wide emission limitation in tons per year or tons per year CO₂e.

(ii) The PAL permit effective date and the expiration date of the PAL (PAL effective period).

(iii) Specification in the PAL permit that if a major stationary source or a GHG-only source owner or operator applies to renew a PAL in accordance with paragraph (aa)(10) of this section before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by a reviewing authority.

(iv) A requirement that emission calculations for compliance purposes must include emissions from startups, shutdowns, and malfunctions.

(v) A requirement that, once the PAL expires, the major stationary source or GHG-only source is subject to the requirements of paragraph (aa)(9) of this section.

(vi) The calculation procedures that the major stationary source or GHG-only source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by paragraph (aa)(13)(i) of this section.

(vii) A requirement that the major stationary source or GHG-only source owner or operator monitor all emissions units in accordance with the provisions under paragraph (aa)(12) of this section.

(viii) A requirement to retain the records required under paragraph (aa)(13) of this section on site. Such records may be retained in an electronic format.

(ix) A requirement to submit the reports required under paragraph (aa)(14) of this section by the required deadlines.

(x) Any other requirements that the Administrator deems necessary to implement and enforce the PAL.

(xi) A permit for a GHG PAL issued to a GHG-only source shall also include a statement denoting that GHG emissions at the source will not be subject to regulation under paragraph (b)(49) of this section as long as the source complies with the PAL.

(8) *PAL effective period and reopening of the PAL permit.* The requirements in paragraphs (aa)(8)(i) and (ii) of this section apply to actuals PALs.

(i) *PAL effective period.* The Administrator shall specify a PAL effective period of 10 years.

(ii) *Reopening of the PAL permit.* (a) During the PAL effective period, the Administrator must reopen the PAL permit to:

(1) Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;

(2) Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under §51.165(a)(3)(ii) of this chapter; and

(3) Revise the PAL to reflect an increase in the PAL as provided under paragraph (aa)(11) of this section.

(b) The Administrator shall have discretion to reopen the PAL permit for the following:

(1) Reduce the PAL to reflect newly applicable Federal requirements (for example, NSPS) with compliance dates after the PAL effective date;

(2) Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the State may impose on the major stationary source or GHG-only source under the State Implementation Plan; and

(3) Reduce the PAL if the reviewing authority determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an air quality related value that has been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public.

(c) Except for the permit reopening in paragraph (aa)(8)(ii)(a)(1) of this section for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of paragraph (aa)(5) of this section.

(9) *Expiration of a PAL.* Any PAL that is not renewed in accordance with the procedures in paragraph (aa)(10) of this section shall expire at the end of the PAL effective period, and the requirements in paragraphs (aa)(9)(i) through (v) of this section shall apply.

(i) Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the procedures in paragraphs (aa)(9)(i)(a) and (b) of this section.

(a) Within the time frame specified for PAL renewals in paragraph (aa)(10)(ii) of this section, the major stationary source or GHG-only source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the Administrator) by distributing the PAL allowable emissions for the major stationary source or GHG-only source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under paragraph (aa)(10)(v) of this section, such distribution shall be made as if the PAL had been adjusted.

(b) The Administrator shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the Administrator determines is appropriate.

(ii) Each emissions unit(s) shall comply with the allowable emission limitation on a 12-month rolling basis. The Administrator may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS, CERMS, PEMS, or CPMS to demonstrate compliance with the allowable emission limitation.

(iii) Until the Administrator issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under paragraph (aa)(9)(i)(b) of this section, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.

(iv) Any physical change or change in the method of operation at the major stationary source or GHG-only source will be subject to major NSR requirements if such change meets the definition of major modification in paragraph (b)(2) of this section.

(v) The major stationary source or GHG-only source owner or operator shall continue to comply with any State or Federal applicable requirements (BACT, RACT, NSPS, etc.) that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to paragraph (r)(4) of this section, but were eliminated by the PAL in accordance with the provisions in paragraph (aa)(1)(ii)(c) of this section.

(10) *Renewal of a PAL.* (i) The Administrator shall follow the procedures specified in paragraph (aa)(5) of this section in approving any request to renew a PAL for a major stationary source or a GHG-only source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the Administrator.

(ii) *Application deadline.* A major stationary source or GHG-only source owner or operator shall submit a timely application to the Administrator to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source or GHG-only source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.

(iii) *Application requirements.* The application to renew a PAL permit shall contain the information required in paragraphs (aa)(10)(iii)(a) through (d) of this section.

(a) The information required in paragraphs (aa)(3)(i) through (iii) of this section.

(b) A proposed PAL level.

(c) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).

(d) Any other information the owner or operator wishes the Administrator to consider in determining the appropriate level for renewing the PAL.

(iv) *PAL adjustment.* In determining whether and how to adjust the PAL, the Administrator shall consider the options outlined in paragraphs (aa)(10)(iv)(a) and (b) of this section. However, in no case may any such adjustment fail to comply with paragraph (aa)(10)(iv)(c) of this section.

(a) If the emissions level calculated in accordance with paragraph (aa)(6) of this section is equal to or greater than 80 percent of the PAL level, the Administrator may renew the PAL at the same level without considering the factors set forth in paragraph (aa)(10)(iv)(b) of this section; or

(b) The Administrator may set the PAL at a level that he or she determines to be more representative of the source's baseline actual emissions, or that he or she determines to be more appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the Administrator in his or her written rationale.

(c) Notwithstanding paragraphs (aa)(10)(iv)(a) and (b) of this section:

(1) If the potential to emit of the major stationary source or GHG-only source is less than the PAL, the Administrator shall adjust the PAL to a level no greater than the potential to emit of the source; and

(2) The Administrator shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source or GHG-only source has complied with the provisions of paragraph (aa)(11) of this section (increasing a PAL).

(v) If the compliance date for a State or Federal requirement that applies to the PAL source occurs during the PAL effective period, and if the Administrator has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or title V permit renewal, whichever occurs first.

(11) *Increasing a PAL during the PAL effective period.* (i) The Administrator may increase a PAL emission limitation only if the major stationary source or GHG-only source complies with the provisions in paragraphs (aa)(11)(i)(a) through (d) of this section.

(a) The owner or operator of the major stationary source or GHG-only source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary or GHG-only source's emissions to equal or exceed its PAL.

(b) As part of this application, the major stationary source or GHG-only source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions unit(s) exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.

(c) The owner or operator obtains a major NSR permit for all emissions unit(s) identified in paragraph (aa)(11)(i)(a) of this section, regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions unit(s) shall comply with any emissions requirements resulting from the major NSR process (for example, BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.

(d) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

(ii) The Administrator shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units (assuming application of BACT equivalent controls as determined in accordance with paragraph (aa)(11)(i)(b)), plus the sum of the baseline actual emissions of the small emissions units.

(iii) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of paragraph (aa)(5) of this section.

(12) *Monitoring requirements for PALs.* (i) *General requirements.* (a) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time or CO₂e per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

(b) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in paragraphs (aa)(12)(ii)(a) through (d) of this section and must be approved by the Administrator.

(c) Notwithstanding paragraph (aa)(12)(i)(b) of this section, you may also employ an alternative monitoring approach that meets paragraph (aa)(12)(i)(a) of this section if approved by the Administrator.

(d) Failure to use a monitoring system that meets the requirements of this section renders the PAL invalid.

(ii) Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in paragraphs (aa)(12)(iii) through (ix) of this section:

(a) Mass balance calculations for activities using coatings or solvents;

(b) CEMS;

(c) CPMS or PEMS; and

(d) Emission factors.

(iii) *Mass balance calculations.* An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:

(a) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;

(b) Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and

(c) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the Administrator determines there is site-specific data or a site-specific monitoring program to support another content within the range.

(iv) *CEMS*. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

(a) CEMS must comply with applicable Performance Specifications found in 40 CFR part 60, appendix B; and

(b) CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.

(v) *CPMS or PEMS*. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

(a) The CPMS or the PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and

(b) Each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the Administrator, while the emissions unit is operating.

(vi) *Emission factors*. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

(a) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;

(b) The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and

(c) If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within 6 months of PAL permit issuance, unless the Administrator determines that testing is not required.

(vii) A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.

(viii) Notwithstanding the requirements in paragraphs (aa)(12)(iii) through (vii) of this section, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the Administrator shall, at the time of permit issuance:

(a) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or

(b) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.

(ix) *Re-validation*. All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the Administrator. Such testing must occur at least once every 5 years after issuance of the PAL.

(13) *Recordkeeping requirements*. (i) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of paragraph (aa) of this section and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of such record.

(ii) The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus 5 years:

(a) A copy of the PAL permit application and any applications for revisions to the PAL; and

(b) Each annual certification of compliance pursuant to title V and the data relied on in certifying the compliance.

(14) *Reporting and notification requirements*. The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the Administrator in accordance with the applicable title V operating permit program. The reports shall meet the requirements in paragraphs (aa)(14)(i) through (iii) of this section.

(i) *Semi-annual report*. The semi-annual report shall be submitted to the Administrator within 30 days of the end of each reporting period. This report shall contain the information required in paragraphs (aa)(14)(i)(a) through (g) of this section.

(a) The identification of owner and operator and the permit number.

(b) Total annual emissions (expressed on a mass-basis in tons per year, or expressed in tons per year CO₂e) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph (aa)(13)(i) of this section.

(c) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.

(d) A list of any emissions units modified or added to the major stationary source or GHG-only source during the preceding 6-month period.

(e) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.

(f) A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by (aa)(12)(vii).

(g) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

(ii) *Deviation report.* The major stationary source or GHG-only source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to §70.6(a)(3)(iii)(B) of this chapter shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the applicable program implementing §70.6(a)(3)(iii)(B) of this chapter. The reports shall contain the following information:

(a) The identification of owner and operator and the permit number;

(b) The PAL requirement that experienced the deviation or that was exceeded;

(c) Emissions resulting from the deviation or the exceedance; and

(d) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

(iii) *Re-validation results.* The owner or operator shall submit to the Administrator the results of any re-validation test or method within 3 months after completion of such test or method.

(15) *Transition requirements.* (i) The Administrator may not issue a PAL that does not comply with the requirements in paragraphs (aa)(1) through (15) of this section after March 3, 2003.

(ii) The Administrator may supersede any PAL that was established prior to March 3, 2003 with a PAL that complies with the requirements of paragraphs (aa)(1) through (15) of this section.

(bb) If any provision of this section, or the application of such provision to any person or circumstance, is held invalid, the remainder of this section, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

(cc) Without regard to other considerations, routine maintenance, repair and replacement includes, but is not limited to, the replacement of any component of a process unit with an identical or functionally equivalent component(s), and maintenance and repair activities that are part of the replacement activity, provided that all of the requirements in paragraphs (cc)(1) through (3) of this section are met.

(1) *Capital cost threshold for equipment replacement.* (i) For an *electric utility steam generating unit*, as defined in §52.21(b)(31), the fixed capital cost of the replacement component(s) plus the cost of any associated maintenance and repair activities that are part of the replacement shall not exceed 20 percent of the replacement value of the process unit, at the time the equipment is replaced. For a process unit that is not an electric utility steam generating unit the fixed capital cost of the replacement component(s) plus the cost of any associated maintenance and repair activities that are part of the replacement shall not exceed 20 percent of the replacement value of the process unit, at the time the equipment is replaced.

(ii) In determining the replacement value of the process unit; and, except as otherwise allowed under paragraph (cc)(1)(iii) of this section, the owner or operator shall determine the replacement value of the process unit on an estimate of the fixed capital cost of constructing a new process unit, or on the current appraised value of the process unit.

(iii) As an alternative to paragraph (cc)(1)(ii) of this section for determining the replacement value of a process unit, an owner or operator may choose to use insurance value (where the insurance value

covers only complete replacement), investment value adjusted for inflation, or another accounting procedure if such procedure is based on Generally Accepted Accounting Principles, provided that the owner or operator sends a notice to the reviewing authority. The first time that an owner or operator submits such a notice for a particular process unit, the notice may be submitted at any time, but any subsequent notice for that process unit may be submitted only at the beginning of the process unit's fiscal year. Unless the owner or operator submits a notice to the reviewing authority, then paragraph (cc)(1)(ii) of this section will be used to establish the replacement value of the process unit. Once the owner or operator submits a notice to use an alternative accounting procedure, the owner or operator must continue to use that procedure for the entire fiscal year for that process unit. In subsequent fiscal years, the owner or operator must continue to use this selected procedure unless and until the owner or operator sends another notice to the reviewing authority selecting another procedure consistent with this paragraph or paragraph (cc)(1)(ii) of this section at the beginning of such fiscal year.

(2) *Basic design parameters.* The replacement does not change the basic design parameter(s) of the process unit to which the activity pertains.

(i) Except as provided in paragraph (cc)(2)(iii) of this section, for a process unit at a steam electric generating facility, the owner or operator may select as its basic design parameters either maximum hourly heat input and maximum hourly fuel consumption rate or maximum hourly electric output rate and maximum steam flow rate. When establishing fuel consumption specifications in terms of weight or volume, the minimum fuel quality based on British Thermal Units content shall be used for determining the basic design parameter(s) for a coal-fired electric utility steam generating unit.

(ii) Except as provided in paragraph (cc)(2)(iii) of this section, the basic design parameter(s) for any process unit that is not at a steam electric generating facility are maximum rate of fuel or heat input, maximum rate of material input, or maximum rate of product output. Combustion process units will typically use maximum rate of fuel input. For sources having multiple end products and raw materials, the owner or operator should consider the primary product or primary raw material when selecting a basic design parameter.

(iii) If the owner or operator believes the basic design parameter(s) in paragraphs (cc)(2)(i) and (ii) of this section is not appropriate for a specific industry or type of process unit, the owner or operator may propose to the reviewing authority an alternative basic design parameter(s) for the source's process unit(s). If the reviewing authority approves of the use of an alternative basic design parameter(s), the reviewing authority shall issue a permit that is legally enforceable that records such basic design parameter(s) and requires the owner or operator to comply with such parameter(s).

(iv) The owner or operator shall use credible information, such as results of historic maximum capability tests, design information from the manufacturer, or engineering calculations, in establishing the magnitude of the basic design parameter(s) specified in paragraphs (cc)(2)(i) and (ii) of this section.

(v) If design information is not available for a process unit, then the owner or operator shall determine the process unit's basic design parameter(s) using the maximum value achieved by the process unit in the five-year period immediately preceding the planned activity.

(vi) Efficiency of a process unit is not a basic design parameter.

(3) The replacement activity shall not cause the process unit to exceed any emission limitation, or operational limitation that has the effect of constraining emissions, that applies to the process unit and that is legally enforceable.

NOTE TO PARAGRAPH (cc): By a court order on December 24, 2003, this paragraph (cc) is stayed indefinitely. The stayed provisions will become effective immediately if the court terminates the stay. At that time, EPA will publish a document in the FEDERAL REGISTER advising the public of the termination of the stay.

[43 FR 26403, June 19, 1978]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §52.21, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.fdsys.gov.

EFFECTIVE DATE NOTES: 1. At 76 FR 17556, Mar. 30, 2011, §52.21(b)(2)(v) and (b)(3)(iii)(c) were stayed indefinitely.

2. At 81 FR 35633, June 3, 2016, §52.21 was amended by revising paragraph (b)(6), effective Aug. 2, 2016. For the convenience of the user, the revised text is set forth as follows:

§52.21 Prevention of significant deterioration of air quality.

* * * * *

(b) * * *

(6)(i) *Building, structure, facility, or installation* means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same “Major Group” (*i.e.*, which have the same first two digit code) as described in the *Standard Industrial Classification Manual, 1972*, as amended by the 1977 Supplement (U.S. Government Printing Office stock numbers 4101-0066 and 003-005-00716-0, respectively).

(ii) Notwithstanding the provisions of paragraph (b)(6)(i) of this section, *building, structure, facility, or installation* means, for onshore activities under Standard Industrial Classification (SIC) Major Group 13: Oil and Gas Extraction, all of the pollutant-emitting activities included in Major Group 13 that are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant emitting activities shall be considered adjacent if they are located on the same surface site; or if they are located on surface sites that are located within $\frac{1}{4}$ mile of one another (measured from the center of the equipment on the surface site) and they share equipment. Shared equipment includes, but is not limited to, produced fluids storage tanks, phase separators, natural gas dehydrators or emissions control devices. Surface site, as used in this paragraph (b)(6)(ii), has the same meaning as in 40 CFR 63.761.

Appendix B

40 C.F.R. Part 60, Subpart GG - *Standards of Performance for Stationary Gas Turbines*

Subpart GG—Standards of Performance for Stationary Gas Turbines

§60.330 Applicability and designation of affected facility.

(a) The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired.

(b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part except as provided in paragraphs (e) and (j) of §60.332.

[44 FR 52798, Sept. 10, 1979, as amended at 52 FR 42434, Nov. 5, 1987; 65 FR 61759, Oct. 17, 2000]

§60.331 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

(a) *Stationary gas turbine* means any simple cycle gas turbine, regenerative cycle gas turbine or any gas turbine portion of a combined cycle steam/electric generating system that is not self propelled. It may, however, be mounted on a vehicle for portability.

(b) *Simple cycle gas turbine* means any stationary gas turbine which does not recover heat from the gas turbine exhaust gases to preheat the inlet combustion air to the gas turbine, or which does not recover heat from the gas turbine exhaust gases to heat water or generate steam.

(c) *Regenerative cycle gas turbine* means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to preheat the inlet combustion air to the gas turbine.

(d) *Combined cycle gas turbine* means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to heat water or generate steam.

(e) *Emergency gas turbine* means any stationary gas turbine which operates as a mechanical or electrical power source only when the primary power source for a facility has been rendered inoperable by an emergency situation.

(f) *Ice fog* means an atmospheric suspension of highly reflective ice crystals.

(g) *ISO standard day conditions* means 288 degrees Kelvin, 60 percent relative humidity and 101.3 kilopascals pressure.

(h) *Efficiency* means the gas turbine manufacturer's rated heat rate at peak load in terms of heat input per unit of power output based on the lower heating value of the fuel.

(i) *Peak load* means 100 percent of the manufacturer's design capacity of the gas turbine at ISO standard day conditions.

(j) *Base load* means the load level at which a gas turbine is normally operated.

(k) *Fire-fighting turbine* means any stationary gas turbine that is used solely to pump water for extinguishing fires.

(l) *Turbines employed in oil/gas production or oil/gas transportation* means any stationary gas turbine used to provide power to extract crude oil/natural gas from the earth or to move crude oil/natural gas, or products refined from these substances through pipelines.

(m) A *Metropolitan Statistical Area or MSA* as defined by the Department of Commerce.

(n) *Offshore platform gas turbines* means any stationary gas turbine located on a platform in an ocean.

(o) *Garrison facility* means any permanent military installation.

(p) *Gas turbine model* means a group of gas turbines having the same nominal air flow, combustor inlet pressure, combustor inlet temperature, firing temperature, turbine inlet temperature and turbine inlet pressure.

(q) *Electric utility stationary gas turbine* means any stationary gas turbine constructed for the purpose of supplying more than one-third of its potential electric output capacity to any utility power distribution system for sale.

(r) *Emergency fuel* is a fuel fired by a gas turbine only during circumstances, such as natural gas supply curtailment or breakdown of delivery system, that make it impossible to fire natural gas in the gas turbine.

(s) *Unit operating hour* means a clock hour during which any fuel is combusted in the affected unit. If the unit combusts fuel for the entire clock hour, it is considered to be a full unit operating hour. If the unit combusts fuel for only part of the clock hour, it is considered to be a partial unit operating hour.

(t) *Excess emissions* means a specified averaging period over which either:

(1) The NO_x emissions are higher than the applicable emission limit in §60.332;

(2) The total sulfur content of the fuel being combusted in the affected facility exceeds the limit specified in §60.333; or

(3) The recorded value of a particular monitored parameter is outside the acceptable range specified in the parameter monitoring plan for the affected unit.

(u) *Natural gas* means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Equivalents of this in other units are as follows: 0.068 weight percent total sulfur, 680 parts per million by weight (ppmw) total sulfur, and 338 parts per million by volume (ppmv) at 20 degrees Celsius total sulfur. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 British thermal units (Btu) per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.

(v) *Duct burner* means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary gas turbine, internal combustion engine, kiln, etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a heat recovery steam generating unit.

(w) *Lean premix stationary combustion turbine* means any stationary combustion turbine where the air and fuel are thoroughly mixed to form a lean mixture for combustion in the combustor. Mixing may occur before or in the combustion chamber. A unit which is capable of operating in both lean premix and diffusion flame modes is considered a lean premix stationary combustion turbine when it is in the lean premix mode, and it is considered a diffusion flame stationary combustion turbine when it is in the diffusion flame mode.

(x) *Diffusion flame stationary combustion turbine* means any stationary combustion turbine where fuel and air are injected at the combustor and are mixed only by diffusion prior to ignition. A unit which is capable of operating in both lean premix and diffusion flame modes is considered a lean premix stationary combustion turbine when it is in the lean premix mode, and it is considered a diffusion flame stationary combustion turbine when it is in the diffusion flame mode.

(y) *Unit operating day* means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

[44 FR 52798, Sept. 10, 1979, as amended at 47 FR 3770, Jan. 27, 1982; 65 FR 61759, Oct. 17, 2000; 69 FR 41359, July 8, 2004]

§60.332 Standard for nitrogen oxides.

(a) On and after the date on which the performance test required by §60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraphs (b), (c), and (d) of this section shall comply with one of the following, except as provided in paragraphs (e), (f), (g), (h), (i), (j), (k), and (l) of this section.

(1) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

where:

STD = allowable ISO corrected (if required as given in §60.335(b)(1)) NO_x emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

F = NO_x emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.

(2) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0150 \frac{(14.4)}{Y} + F$$

where:

STD = allowable ISO corrected (if required as given in §60.335(b)(1)) NO_x emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

F = NO_x emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.

(3) The use of F in paragraphs (a)(1) and (2) of this section is optional. That is, the owner or operator may choose to apply a NO_x allowance for fuel-bound nitrogen and determine the appropriate F-value in accordance with paragraph (a)(4) of this section or may accept an F-value of zero.

(4) If the owner or operator elects to apply a NO_x emission allowance for fuel-bound nitrogen, F shall be defined according to the nitrogen content of the fuel during the most recent performance test required under §60.8 as follows:

Fuel-bound nitrogen (percent by weight)	F (NO_x percent by volume)
N .015	0
0.015 <N≤0.1	0.04 (N)
0.1 <N≤0.25	0.004 + 0.0067(N-0.1)
N >0.25	0.005

Where:

N = the nitrogen content of the fuel (percent by weight).

or:

Manufacturers may develop and submit to EPA custom fuel-bound nitrogen allowances for each gas turbine model they manufacture. These fuel-bound nitrogen allowances shall be substantiated with data and must be approved for use by the Administrator before the initial performance test required by §60.8. Notices of approval of custom fuel-bound nitrogen allowances will be published in the FEDERAL REGISTER.

(b) Electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the provisions of paragraph (a)(1) of this section.

(c) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired, shall comply with the provisions of paragraph (a)(2) of this section.

(d) Stationary gas turbines with a manufacturer's rated base load at ISO conditions of 30 megawatts or less except as provided in §60.332(b) shall comply with paragraph (a)(2) of this section.

(e) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired and that have commenced construction prior to October 3, 1982 are exempt from paragraph (a) of this section.

(f) Stationary gas turbines using water or steam injection for control of NO_x emissions are exempt from paragraph (a) when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine.

(g) Emergency gas turbines, military gas turbines for use in other than a garrison facility, military gas turbines installed for use as military training facilities, and fire fighting gas turbines are exempt from paragraph (a) of this section.

(h) Stationary gas turbines engaged by manufacturers in research and development of equipment for both gas turbine emission control techniques and gas turbine efficiency improvements are exempt from paragraph (a) on a case-by-case basis as determined by the Administrator.

(i) Exemptions from the requirements of paragraph (a) of this section will be granted on a case-by-case basis as determined by the Administrator in specific geographical areas where mandatory water restrictions are required by governmental agencies because of drought conditions. These exemptions will be allowed only while the mandatory water restrictions are in effect.

(j) Stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour that commenced construction, modification, or reconstruction between the dates of October 3, 1977, and January 27, 1982, and were required in the September 10, 1979, FEDERAL REGISTER (44 FR 52792) to comply with paragraph (a)(1) of this section, except electric utility stationary gas turbines, are exempt from paragraph (a) of this section.

(k) Stationary gas turbines with a heat input greater than or equal to 10.7 gigajoules per hour (10 million Btu/hour) when fired with natural gas are exempt from paragraph (a)(2) of this section when being fired with an emergency fuel.

(l) Regenerative cycle gas turbines with a heat input less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) are exempt from paragraph (a) of this section.

[44 FR 52798, Sept. 10, 1979, as amended at 47 FR 3770, Jan. 27, 1982; 65 FR 61759, Oct. 17, 2000; 69 FR 41359, July 8, 2004]

§60.333 Standard for sulfur dioxide.

On and after the date on which the performance test required to be conducted by §60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with one or the other of the following conditions:

(a) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis.

(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw).

[44 FR 52798, Sept. 10, 1979, as amended at 69 FR 41360, July 8, 2004]

§60.334 Monitoring of operations.

(a) Except as provided in paragraph (b) of this section, the owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water or steam injection to control NO_x emissions shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine.

(b) The owner or operator of any stationary gas turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which uses water or steam injection to control NO_x emissions may, as an alternative to operating the continuous monitoring system described in paragraph (a) of this section, install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO_x and O₂ monitors. As an alternative, a CO₂ monitor may be used to adjust the measured NO_x concentrations to 15 percent O₂ by either converting the CO₂ hourly averages to equivalent O₂ concentrations using Equation F-14a or F-14b in appendix F to part 75 of this chapter and making the adjustments to 15 percent O₂, or by using the CO₂ readings directly to make the adjustments, as described in Method 20. If the option to use a CEMS is chosen, the CEMS shall be installed, certified, maintained and operated as follows:

(1) Each CEMS must be installed and certified according to PS 2 and 3 (for diluent) of 40 CFR part 60, appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. Appendix F, Procedure 1 is not required. The relative accuracy test audit (RATA) of the NO_x and diluent monitors may be performed individually or on a combined basis, *i.e.*, the relative accuracy tests of the CEMS may be performed either:

(i) On a ppm basis (for NO_x) and a percent O₂ basis for oxygen; or

(ii) On a ppm at 15 percent O₂ basis; or

(iii) On a ppm basis (for NO_x) and a percent CO₂ basis (for a CO₂ monitor that uses the procedures in Method 20 to correct the NO_x data to 15 percent O₂).

(2) As specified in §60.13(e)(2), during each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour.

(3) For purposes of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in §60.13(h).

(i) For each unit operating hour in which a valid hourly average, as described in paragraph (b)(2) of this section, is obtained for both NO_x and diluent, the data acquisition and handling system must calculate and record the hourly NO_x emissions in the units of the applicable NO_x emission standard under §60.332(a), *i.e.*, percent NO_x by volume, dry basis, corrected to 15 percent O₂ and International Organization for Standardization (ISO) standard conditions (if required as given in §60.335(b)(1)). For any hour in which the hourly average O₂ concentration exceeds 19.0 percent O₂, a diluent cap value of 19.0 percent O₂ may be used in the emission calculations.

(ii) A worst case ISO correction factor may be calculated and applied using historical ambient data. For the purpose of this calculation, substitute the maximum humidity of ambient air (H_o), minimum ambient temperature (T_a), and minimum combustor inlet absolute pressure (P_o) into the ISO correction equation.

(iii) If the owner or operator has installed a NO_x CEMS to meet the requirements of part 75 of this chapter, and is continuing to meet the ongoing requirements of part 75 of this chapter, the CEMS may be

used to meet the requirements of this section, except that the missing data substitution methodology provided for at 40 CFR part 75, subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in §60.7(c).

(c) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which does not use steam or water injection to control NO_x emissions, the owner or operator may, but is not required to, for purposes of determining excess emissions, use a CEMS that meets the requirements of paragraph (b) of this section. Also, if the owner or operator has previously submitted and received EPA, State, or local permitting authority approval of a procedure for monitoring compliance with the applicable NO_x emission limit under §60.332, that approved procedure may continue to be used.

(d) The owner or operator of any new turbine constructed after July 8, 2004, and which uses water or steam injection to control NO_x emissions may elect to use either the requirements in paragraph (a) of this section for continuous water or steam to fuel ratio monitoring or may use a NO_x CEMS installed, certified, operated, maintained, and quality-assured as described in paragraph (b) of this section.

(e) The owner or operator of any new turbine that commences construction after July 8, 2004, and which does not use water or steam injection to control NO_x emissions, may, but is not required to, elect to use a NO_x CEMS installed, certified, operated, maintained, and quality-assured as described in paragraph (b) of this section. Other acceptable monitoring approaches include periodic testing approved by EPA or the State or local permitting authority or continuous parameter monitoring as described in paragraph (f) of this section.

(f) The owner or operator of a new turbine that commences construction after July 8, 2004, which does not use water or steam injection to control NO_x emissions may, but is not required to, perform continuous parameter monitoring as follows:

(1) For a diffusion flame turbine without add-on selective catalytic reduction controls (SCR), the owner or operator shall define at least four parameters indicative of the unit's NO_x formation characteristics and shall monitor these parameters continuously.

(2) For any lean premix stationary combustion turbine, the owner or operator shall continuously monitor the appropriate parameters to determine whether the unit is operating in low-NO_x mode.

(3) For any turbine that uses SCR to reduce NO_x emissions, the owner or operator shall continuously monitor appropriate parameters to verify the proper operation of the emission controls.

(4) For affected units that are also regulated under part 75 of this chapter, if the owner or operator elects to monitor NO_x emission rate using the methodology in appendix E to part 75 of this chapter, or the low mass emissions methodology in §75.19 of this chapter, the requirements of this paragraph (f) may be met by performing the parametric monitoring described in section 2.3 of appendix E or in §75.19(c)(1)(iv)(H) of this chapter.

(g) The steam or water to fuel ratio or other parameters that are continuously monitored as described in paragraphs (a), (d) or (f) of this section shall be monitored during the performance test required under §60.8, to establish acceptable values and ranges. The owner or operator may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. The owner or operator shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NO_x emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering

analyses, design specifications, manufacturer's recommendations and other relevant information shall be included in the monitoring plan. For affected units that are also subject to part 75 of this chapter and that use the low mass emissions methodology in §75.19 of this chapter or the NO_x emission measurement methodology in appendix E to part 75, the owner or operator may meet the requirements of this paragraph by developing and keeping on-site (or at a central location for unmanned facilities) a quality-assurance plan, as described in §75.19 (e)(5) or in section 2.3 of appendix E and section 1.3.6 of appendix B to part 75 of this chapter.

(h) The owner or operator of any stationary gas turbine subject to the provisions of this subpart:

(1) Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in paragraph (h)(3) of this section. The sulfur content of the fuel must be determined using total sulfur methods described in §60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86 (all of which are incorporated by reference-see §60.17), which measure the major sulfur compounds may be used; and

(2) Shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen (*i.e.*, if an F-value greater than zero is being or will be used by the owner or operator to calculate STD in §60.332). The nitrogen content of the fuel shall be determined using methods described in §60.335(b)(9) or an approved alternative.

(3) Notwithstanding the provisions of paragraph (h)(1) of this section, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:

(i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or

(ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

(4) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and for which a custom fuel monitoring schedule has previously been approved, the owner or operator may, without submitting a special petition to the Administrator, continue monitoring on this schedule.

(i) The frequency of determining the sulfur and nitrogen content of the fuel shall be as follows:

(1) *Fuel oil.* For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of appendix D to part 75 of this chapter (*i.e.*, flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). If an emission allowance is being claimed for fuel-bound nitrogen, the nitrogen content of the oil shall be determined and recorded once per unit operating day.

(2) *Gaseous fuel.* Any applicable nitrogen content value of the gaseous fuel shall be determined and recorded once per unit operating day. For owners and operators that elect not to demonstrate sulfur content using options in paragraph (h)(3) of this section, and for which the fuel is supplied without

intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day.

(3) *Custom schedules.* Notwithstanding the requirements of paragraph (i)(2) of this section, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs (i)(3)(i) and (i)(3)(ii) of this section, custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in §60.333.

(i) The two custom sulfur monitoring schedules set forth in paragraphs (i)(3)(i)(A) through (D) and in paragraph (i)(3)(ii) of this section are acceptable, without prior Administrative approval:

(A) The owner or operator shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in this subpart. Based on the results of the 30 daily samples, the required frequency for subsequent monitoring of the fuel's total sulfur content shall be as specified in paragraph (i)(3)(i)(B), (C), or (D) of this section, as applicable.

(B) If none of the 30 daily measurements of the fuel's total sulfur content exceeds 0.4 weight percent (4000 ppmw), subsequent sulfur content monitoring may be performed at 12 month intervals. If any of the samples taken at 12-month intervals has a total sulfur content between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), follow the procedures in paragraph (i)(3)(i)(C) of this section. If any measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section.

(C) If at least one of the 30 daily measurements of the fuel's total sulfur content is between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), but none exceeds 0.8 weight percent (8000 ppmw), then:

(1) Collect and analyze a sample every 30 days for three months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(2) of this section.

(2) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(3) of this section.

(3) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, continue to monitor at this frequency.

(D) If a sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), immediately begin daily monitoring according to paragraph (i)(3)(i)(A) of this section. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur content no greater than 0.8 weight percent (8000 ppmw), are obtained. At that point, the applicable procedures of paragraph (i)(3)(i)(B) or (C) of this section shall be followed.

(ii) The owner or operator may use the data collected from the 720-hour sulfur sampling demonstration described in section 2.3.6 of appendix D to part 75 of this chapter to determine a custom sulfur sampling schedule, as follows:

(A) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf (*i.e.*, the maximum total sulfur content of natural gas as defined in §60.331(u)), no additional monitoring of the sulfur content of the gas is required, for the purposes of this subpart.

(B) If the maximum fuel sulfur content obtained from any of the 720 hourly samples exceeds 20 grains/100 scf, but none of the sulfur content values (when converted to weight percent sulfur) exceeds 0.4 weight percent (4000 ppmw), then the minimum required sampling frequency shall be one sample at 12 month intervals.

(C) If any sample result exceeds 0.4 weight percent sulfur (4000 ppmw), but none exceeds 0.8 weight percent sulfur (8000 ppmw), follow the provisions of paragraph (i)(3)(i)(C) of this section.

(D) If the sulfur content of any of the 720 hourly samples exceeds 0.8 weight percent (8000 ppmw), follow the provisions of paragraph (i)(3)(i)(D) of this section.

(j) For each affected unit that elects to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content under this subpart, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:

(1) Nitrogen oxides.

(i) For turbines using water or steam to fuel ratio monitoring:

(A) An excess emission shall be any unit operating hour for which the average steam or water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable steam or water to fuel ratio needed to demonstrate compliance with §60.332, as established during the performance test required in §60.8. Any unit operating hour in which no water or steam is injected into the turbine shall also be considered an excess emission.

(B) A period of monitor downtime shall be any unit operating hour in which water or steam is injected into the turbine, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.

(C) Each report shall include the average steam or water to fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), gas turbine load, and (if applicable) the nitrogen content of the fuel during each excess emission. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in §60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of §60.335(b)(1).

(ii) If the owner or operator elects to take an emission allowance for fuel bound nitrogen, then excess emissions and periods of monitor downtime are as described in paragraphs (j)(1)(ii)(A) and (B) of this section.

(A) An excess emission shall be the period of time during which the fuel-bound nitrogen (N) is greater than the value measured during the performance test required in §60.8 and used to determine the allowance. The excess emission begins on the date and hour of the sample which shows that N is greater than the performance test value, and ends with the date and hour of a subsequent sample which shows a fuel nitrogen content less than or equal to the performance test value.

(B) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour that a required sample is taken, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.

(iii) For turbines using NO_x and diluent CEMS:

(A) An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NO_x concentration exceeds the applicable emission limit in §60.332(a)(1) or (2). For the purposes of this subpart, a "4-hour rolling average NO_x concentration" is the arithmetic average of the average NO_x concentration measured by the CEMS for a given hour (corrected to 15 percent O₂ and, if required under §60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NO_x concentrations immediately preceding that unit operating hour.

(B) A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NO_x concentration or diluent (or both).

(C) Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period and (if the owner or operator has claimed an emission allowance for fuel bound nitrogen) the nitrogen content of the fuel during the period of excess emissions. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in §60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of §60.335(b)(1).

(iv) For owners or operators that elect, under paragraph (f) of this section, to monitor combustion parameters or parameters that document proper operation of the NO_x emission controls:

(A) An excess emission shall be a 4-hour rolling unit operating hour average in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the parameter monitoring plan for the unit.

(B) A period of monitor downtime shall be a unit operating hour in which any of the required parametric data are either not recorded or are invalid.

(2) Sulfur dioxide. If the owner or operator is required to monitor the sulfur content of the fuel under paragraph (h) of this section:

(i) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

(ii) If the option to sample each delivery of fuel oil has been selected, the owner or operator shall immediately switch to one of the other oil sampling options (*i.e.*, daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.8 weight percent. The owner or operator shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions according to paragraph (j)(2)(i) of this section. When all of the fuel from the delivery has been burned, the owner or operator may resume using the as-delivered sampling option.

(iii) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.

(3) *Ice fog*. Each period during which an exemption provided in §60.332(f) is in effect shall be reported in writing to the Administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.

(4) *Emergency fuel*. Each period during which an exemption provided in §60.332(k) is in effect shall be included in the report required in §60.7(c). For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported.

(5) All reports required under §60.7(c) shall be postmarked by the 30th day following the end of each 6-month period.

[44 FR 52798, Sept. 10, 1979, as amended at 47 FR 3770, Jan. 27, 1982; 65 FR 61759, Oct. 17, 2000; 69 FR 41360, July 8, 2004; 71 FR 9457, Feb. 24, 2006]

§60.335 Test methods and procedures.

(a) The owner or operator shall conduct the performance tests required in §60.8, using either

(1) EPA Method 20,

(2) ASTM D6522-00 (incorporated by reference, see §60.17), or

(3) EPA Method 7E and either EPA Method 3 or 3A in appendix A to this part, to determine NO_x and diluent concentration.

(4) Sampling traverse points are to be selected following Method 20 or Method 1, (non-particulate procedures) and sampled for equal time intervals. The sampling shall be performed with a traversing single-hole probe or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.

(5) Notwithstanding paragraph (a)(4) of this section, the owner or operator may test at few points than are specified in Method 1 or Method 20 if the following conditions are met:

(i) You may perform a stratification test for NO_x and diluent pursuant to

(A) [Reserved]

(B) The procedures specified in section 6.5.6.1(a) through (e) appendix A to part 75 of this chapter.

(ii) Once the stratification sampling is completed, the owner or operator may use the following alternative sample point selection criteria for the performance test:

(A) If each of the individual traverse point NO_x concentrations, normalized to 15 percent O₂, is within 10 percent of the mean normalized concentration for all traverse points, then you may use 3 points (located either 16.7, 50.0, and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The 3 points shall be located along the measurement line that exhibited the highest average normalized NO_x concentration during the stratification test; or

(B) If each of the individual traverse point NO_x concentrations, normalized to 15 percent O₂, is within 5 percent of the mean normalized concentration for all traverse points, then you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid.

(6) Other acceptable alternative reference methods and procedures are given in paragraph (c) of this section.

(b) The owner or operator shall determine compliance with the applicable nitrogen oxides emission limitation in §60.332 and shall meet the performance test requirements of §60.8 as follows:

(1) For each run of the performance test, the mean nitrogen oxides emission concentration (NO_{x_0}) corrected to 15 percent O_2 shall be corrected to ISO standard conditions using the following equation. Notwithstanding this requirement, use of the ISO correction equation is optional for: Lean premix stationary combustion turbines; units used in association with heat recovery steam generators (HRSG) equipped with duct burners; and units equipped with add-on emission control devices:

$$\text{NO}_x = (\text{NO}_{x_0})(P_r/P_o)^{0.5} e^{19(H_o-0.00633)} (288 \text{ }^\circ\text{K}/T_a)^{1.53}$$

Where:

NO_x = emission concentration of NO_x at 15 percent O_2 and ISO standard ambient conditions, ppm by volume, dry basis,

NO_{x_0} = mean observed NO_x concentration, ppm by volume, dry basis, at 15 percent O_2 ,

P_r = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure. Alternatively, you may use 760 mm Hg (29.92 in Hg),

P_o = observed combustor inlet absolute pressure at test, mm Hg. Alternatively, you may use the barometric pressure for the date of the test,

H_o = observed humidity of ambient air, g $\text{H}_2\text{O}/\text{g}$ air,

e = transcendental constant, 2.718, and

T_a = ambient temperature, $^\circ\text{K}$.

(2) The 3-run performance test required by §60.8 must be performed within 5 percent at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. If the turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel. Notwithstanding these requirements, performance testing is not required for any emergency fuel (as defined in §60.331).

(3) For a combined cycle turbine system with supplemental heat (duct burner), the owner or operator may elect to measure the turbine NO_x emissions after the duct burner rather than directly after the turbine. If the owner or operator elects to use this alternative sampling location, the applicable NO_x emission limit in §60.332 for the combustion turbine must still be met.

(4) If water or steam injection is used to control NO_x with no additional post-combustion NO_x control and the owner or operator chooses to monitor the steam or water to fuel ratio in accordance with §60.334(a), then that monitoring system must be operated concurrently with each EPA Method 20, ASTM D6522-00 (incorporated by reference, see §60.17), or EPA Method 7E run and shall be used to determine the fuel consumption and the steam or water to fuel ratio necessary to comply with the applicable §60.332 NO_x emission limit.

(5) If the owner operator elects to claim an emission allowance for fuel bound nitrogen as described in §60.332, then concurrently with each reference method run, a representative sample of the fuel used shall be collected and analyzed, following the applicable procedures described in §60.335(b)(9). These data shall be used to determine the maximum fuel nitrogen content for which the established water (or steam) to fuel ratio will be valid.

(6) If the owner or operator elects to install a CEMS, the performance evaluation of the CEMS may either be conducted separately (as described in paragraph (b)(7) of this section) or as part of the initial performance test of the affected unit.

(7) If the owner or operator elects to install and certify a NO_x CEMS under §60.334(e), then the initial performance test required under §60.8 may be done in the following alternative manner:

(i) Perform a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load.

(ii) Use the test data both to demonstrate compliance with the applicable NO_x emission limit under §60.332 and to provide the required reference method data for the RATA of the CEMS described under §60.334(b).

(iii) The requirement to test at three additional load levels is waived.

(8) If the owner or operator elects under §60.334(f) to monitor combustion parameters or parameters indicative of proper operation of NO_x emission controls, the appropriate parameters shall be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in §60.334(g).

(9) To determine the fuel bound nitrogen content of fuel being fired (if an emission allowance is claimed for fuel bound nitrogen), the owner or operator may use equipment and procedures meeting the requirements of:

(i) For liquid fuels, ASTM D2597-94 (Reapproved 1999), D6366-99, D4629-02, D5762-02 (all of which are incorporated by reference, see §60.17); or

(ii) For gaseous fuels, shall use analytical methods and procedures that are accurate to within 5 percent of the instrument range and are approved by the Administrator.

(10) If the owner or operator is required under §60.334(i)(1) or (3) to periodically determine the sulfur content of the fuel combusted in the turbine, a minimum of three fuel samples shall be collected during the performance test. Analyze the samples for the total sulfur content of the fuel using:

(i) For liquid fuels, ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00 or D1552-01 (all of which are incorporated by reference, see §60.17); or

(ii) For gaseous fuels, ASTM D1072-80, 90 (Reapproved 1994); D3246-81, 92, 96; D4468-85 (Reapproved 2000); or D6667-01 (all of which are incorporated by reference, see §60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the prior approval of the Administrator.

(11) The fuel analyses required under paragraphs (b)(9) and (b)(10) of this section may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

(c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) Instead of using the equation in paragraph (b)(1) of this section, manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in §60.8 to ISO standard day conditions.

[69 FR 41363, July 8, 2004, as amended at 71 FR 9458, Feb. 24, 2006; 79 FR 11250, Feb. 27, 2014]

Appendix C
40 C.F.R. Part 60, Subpart Db- *Standards of Performance for Industrial-Commercial-
Institutional Steam Generating Units*

Subpart Db—Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

SOURCE: 72 FR 32742, June 13, 2007, unless otherwise noted.

§60.40b Applicability and delegation of authority.

(a) The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).

(b) Any affected facility meeting the applicability requirements under paragraph (a) of this section and commencing construction, modification, or reconstruction after June 19, 1984, but on or before June 19, 1986, is subject to the following standards:

(1) Coal-fired affected facilities having a heat input capacity between 29 and 73 MW (100 and 250 MMBtu/hr), inclusive, are subject to the particulate matter (PM) and nitrogen oxides (NO_x) standards under this subpart.

(2) Coal-fired affected facilities having a heat input capacity greater than 73 MW (250 MMBtu/hr) and meeting the applicability requirements under subpart D (Standards of performance for fossil-fuel-fired steam generators; §60.40) are subject to the PM and NO_x standards under this subpart and to the sulfur dioxide (SO₂) standards under subpart D (§60.43).

(3) Oil-fired affected facilities having a heat input capacity between 29 and 73 MW (100 and 250 MMBtu/hr), inclusive, are subject to the NO_x standards under this subpart.

(4) Oil-fired affected facilities having a heat input capacity greater than 73 MW (250 MMBtu/hr) and meeting the applicability requirements under subpart D (Standards of performance for fossil-fuel-fired steam generators; §60.40) are also subject to the NO_x standards under this subpart and the PM and SO₂ standards under subpart D (§60.42 and §60.43).

(c) Affected facilities that also meet the applicability requirements under subpart J or subpart Ja of this part are subject to the PM and NO_x standards under this subpart and the SO₂ standards under subpart J or subpart Ja of this part, as applicable.

(d) Affected facilities that also meet the applicability requirements under subpart E (Standards of performance for incinerators; §60.50) are subject to the NO_x and PM standards under this subpart.

(e) Steam generating units meeting the applicability requirements under subpart Da (Standards of performance for electric utility steam generating units; §60.40Da) are not subject to this subpart.

(f) Any change to an existing steam generating unit for the sole purpose of combusting gases containing total reduced sulfur (TRS) as defined under §60.281 is not considered a modification under §60.14 and the steam generating unit is not subject to this subpart.

(g) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, the following authorities shall be retained by the Administrator and not transferred to a State.

(1) Section 60.44b(f).

(2) Section 60.44b(g).

(3) Section 60.49b(a)(4).

(h) Any affected facility that meets the applicability requirements and is subject to subpart Ea, subpart Eb, subpart AAAA, or subpart CCCC of this part is not subject to this subpart.

(i) Affected facilities (*i.e.*, heat recovery steam generators) that are associated with stationary combustion turbines and that meet the applicability requirements of subpart KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other affected facilities (*i.e.* heat recovery steam generators with duct burners) that are capable of combusting more than 29 MW (100 MMBtu/h) heat input of fossil fuel. If the affected facility (*i.e.* heat recovery steam generator) is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The stationary combustion turbine emissions are subject to subpart GG or KKKK, as applicable, of this part.)

(j) Any affected facility meeting the applicability requirements under paragraph (a) of this section and commencing construction, modification, or reconstruction after June 19, 1986 is not subject to subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators, §60.40).

(k) Any affected facility that meets the applicability requirements and is subject to an EPA approved State or Federal section 111(d)/129 plan implementing subpart Cb or subpart BBBB of this part is not covered by this subpart.

(l) Affected facilities that also meet the applicability requirements under subpart BB of this part (Standards of Performance for Kraft Pulp Mills) are subject to the SO₂ and NO_x standards under this subpart and the PM standards under subpart BB.

(m) Temporary boilers are not subject to this subpart.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5084, Jan. 28, 2009; 77 FR 9459, Feb. 16, 2012]

§60.41b Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility in a calendar year.

Byproduct/waste means any liquid or gaseous substance produced at chemical manufacturing plants, petroleum refineries, or pulp and paper mills (except natural gas, distillate oil, or residual oil) and combusted in a steam generating unit for heat recovery or for disposal. Gaseous substances with carbon

dioxide (CO₂) levels greater than 50 percent or carbon monoxide levels greater than 10 percent are not byproduct/waste for the purpose of this subpart.

Chemical manufacturing plants mean industrial plants that are classified by the Department of Commerce under Standard Industrial Classification (SIC) Code 28.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels, including but not limited to solvent refined coal, gasified coal not meeting the definition of natural gas, coal-oil mixtures, coke oven gas, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any byproduct of coal mining or coal cleaning operations with an ash content greater than 50 percent, by weight, and a heating value less than 13,900 kJ/kg (6,000 Btu/lb) on a dry basis.

Cogeneration, also known as combined heat and power, means a facility that simultaneously produces both electric (or mechanical) and useful thermal energy from the same primary energy source.

Coke oven gas means the volatile constituents generated in the gaseous exhaust during the carbonization of bituminous coal to form coke.

Combined cycle system means a system in which a separate source, such as a gas turbine, internal combustion engine, kiln, etc., provides exhaust gas to a steam generating unit.

Conventional technology means wet flue gas desulfurization (FGD) technology, dry FGD technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396 (incorporated by reference, see §60.17), diesel fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see §60.17), kerosine, as defined by the American Society of Testing and Materials in ASTM D3699 (incorporated by reference, see §60.17), biodiesel as defined by the American Society of Testing and Materials in ASTM D6751 (incorporated by reference, see §60.17), or biodiesel blends as defined by the American Society of Testing and Materials in ASTM D7467 (incorporated by reference, see §60.17).

Dry flue gas desulfurization technology means a SO₂ control system that is located downstream of the steam generating unit and removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline slurries or solutions used in dry flue gas desulfurization technology include but are not limited to lime and sodium.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary gas turbine, internal combustion engine, kiln, etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO₂ control system that is not defined as a conventional technology under this section, and for which the owner or operator of the facility has applied to the Administrator and received approval to operate as an emerging technology under §60.49b(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State Implementation Plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

Fluidized bed combustion technology means combustion of fuel in a bed or series of beds (including but not limited to bubbling bed units and circulating bed units) of limestone aggregate (or other sorbent materials) in which these materials are forced upward by the flow of combustion air and the gaseous products of combustion.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Full capacity means operation of the steam generating unit at 90 percent or more of the maximum steady-state design heat input capacity.

Gaseous fuel means any fuel that is a gas at ISO conditions. This includes, but is not limited to, natural gas and gasified coal (including coke oven gas).

Gross output means the gross useful work performed by the steam generated. For units generating only electricity, the gross useful work performed is the gross electrical output from the turbine/generator set. For cogeneration units, the gross useful work performed is the gross electrical or mechanical output plus 75 percent of the useful thermal output measured relative to ISO conditions that is not used to generate additional electrical or mechanical output or to enhance the performance of the unit (*i.e.*, steam delivered to an industrial process).

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

Heat release rate means the steam generating unit design heat input capacity (in MW or Btu/hr) divided by the furnace volume (in cubic meters or cubic feet); the furnace volume is that volume bounded by the front furnace wall where the burner is located, the furnace side waterwall, and extending to the level just below or in front of the first row of convection pass tubes.

Heat transfer medium means any material that is used to transfer heat from one point to another point.

High heat release rate means a heat release rate greater than 730,000 J/sec-m³ (70,000 Btu/hr-ft³).

ISO Conditions means a temperature of 288 Kelvin, a relative humidity of 60 percent, and a pressure of 101.3 kilopascals.

Lignite means a type of coal classified as lignite A or lignite B by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17).

Low heat release rate means a heat release rate of 730,000 J/sec-m³ (70,000 Btu/hr-ft³) or less.

Mass-feed stoker steam generating unit means a steam generating unit where solid fuel is introduced directly into a retort or is fed directly onto a grate where it is combusted.

Maximum heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel on a steady state basis, as determined by the physical design and characteristics of the steam generating unit.

Municipal-type solid waste means refuse, more than 50 percent of which is waste consisting of a mixture of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustible materials, and noncombustible materials such as glass and rock.

Natural gas means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquefied petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17); or

(3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil.

Petroleum refinery means industrial plants as classified by the Department of Commerce under Standard Industrial Classification (SIC) Code 29.

Potential sulfur dioxide emission rate means the theoretical SO₂ emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems. For gasified coal or oil that is desulfurized prior to combustion, the *Potential sulfur dioxide emission rate* is the theoretical SO₂ emissions (ng/J or lb/MMBtu heat input) that would result from combusting fuel in a cleaned state without using any post combustion emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Pulp and paper mills means industrial plants that are classified by the Department of Commerce under North American Industry Classification System (NAICS) Code 322 or Standard Industrial Classification (SIC) Code 26.

Pulverized coal-fired steam generating unit means a steam generating unit in which pulverized coal is introduced into an air stream that carries the coal to the combustion chamber of the steam generating unit where it is fired in suspension. This includes both conventional pulverized coal-fired and micropulverized coal-fired steam generating units. Residual oil means crude oil, fuel oil numbers 1 and 2 that have a nitrogen content greater than 0.05 weight percent, and all fuel oil numbers 4, 5 and 6, as defined by the American Society of Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).

Spreader stoker steam generating unit means a steam generating unit in which solid fuel is introduced to the combustion zone by a mechanism that throws the fuel onto a grate from above. Combustion takes place both in suspension and on the grate.

Steam generating unit means a device that combusts any fuel or byproduct/waste and produces steam or heats water or heats any heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters as they are defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Temporary boiler means any gaseous or liquid fuel-fired steam generating unit that is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A steam generating unit is not a temporary boiler if any one of the following conditions exists:

- (1) The equipment is attached to a foundation.
- (2) The steam generating unit or a replacement remains at a location for more than 180 consecutive days. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.
- (3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.
- (4) The equipment is moved from one location to another in an attempt to circumvent the residence time requirements of this definition.

Very low sulfur oil means for units constructed, reconstructed, or modified on or before February 28, 2005, oil that contains no more than 0.5 weight percent sulfur or that, when combusted without SO₂ emission control, has a SO₂ emission rate equal to or less than 215 ng/J (0.5 lb/MMBtu) heat input. For units constructed, reconstructed, or modified after February 28, 2005 and not located in a noncontinental area, *very low sulfur oil* means oil that contains no more than 0.30 weight percent sulfur or that, when combusted without SO₂ emission control, has a SO₂ emission rate equal to or less than 140 ng/J (0.32 lb/MMBtu) heat input. For units constructed, reconstructed, or modified after February 28, 2005 and located in a noncontinental area, *very low sulfur oil* means oil that contains no more than 0.5 weight percent sulfur or that, when combusted without SO₂ emission control, has a SO₂ emission rate equal to or less than 215 ng/J (0.50 lb/MMBtu) heat input.

Wet flue gas desulfurization technology means a SO₂ control system that is located downstream of the steam generating unit and removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gas with an alkaline slurry or solution and forming a liquid material. This definition applies to devices where the aqueous liquid material product of this contact is subsequently converted to other forms. Alkaline reagents used in wet flue gas desulfurization technology include, but are not limited to, lime, limestone, and sodium.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO₂.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including, but not limited to, sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5084, Jan. 28, 2009; 77 FR 9459, Feb. 16, 2012]

§60.42b Standard for sulfur dioxide (SO₂).

(a) Except as provided in paragraphs (b), (c), (d), or (j) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or oil shall cause to be discharged into the atmosphere any gases that contain SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) or 10 percent (0.10) of the potential SO₂ emission rate (90 percent reduction) and the emission limit determined according to the following formula:

$$E_s = \frac{(K_a H_a + K_b H_b)}{(H_a + H_b)}$$

Where:

E_s = SO₂ emission limit, in ng/J or lb/MMBtu heat input;

K_a = 520 ng/J (or 1.2 lb/MMBtu);

K_b = 340 ng/J (or 0.80 lb/MMBtu);

H_a = Heat input from the combustion of coal, in J (MMBtu); and

H_b = Heat input from the combustion of oil, in J (MMBtu).

For facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

(b) On and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal refuse alone in a fluidized bed combustion steam generating unit shall cause to be discharged into the atmosphere any gases that contain SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) or 20 percent (0.20) of the potential SO₂ emission rate (80 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input. If coal or oil is fired with coal refuse, the affected facility is subject to paragraph (a) or (d) of this section, as applicable. For facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

(c) On and after the date on which the performance test is completed or is required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that combusts coal or oil, either alone or in combination with any other fuel, and that uses an emerging technology for the control of SO₂ emissions, shall cause to be discharged into the atmosphere any gases that contain SO₂ in excess

of 50 percent of the potential SO₂ emission rate (50 percent reduction) and that contain SO₂ in excess of the emission limit determined according to the following formula:

$$E_s = \frac{(K_c H_c + K_o H_o)}{(H_c + H_o)}$$

Where:

E_s = SO₂ emission limit, in ng/J or lb/MM Btu heat input;

K_c = 260 ng/J (or 0.60 lb/MMBtu);

K_o = 170 ng/J (or 0.40 lb/MMBtu);

H_c = Heat input from the combustion of coal, in J (MMBtu); and

H_o = Heat input from the combustion of oil, in J (MMBtu).

For facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels, or from the heat input derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

(d) On and after the date on which the performance test is completed or required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005 and listed in paragraphs (d)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere any gases that contain SO₂ in excess of 520 ng/J (1.2 lb/MMBtu) heat input if the affected facility combusts coal, or 215 ng/J (0.5 lb/MMBtu) heat input if the affected facility combusts oil other than very low sulfur oil. Percent reduction requirements are not applicable to affected facilities under paragraphs (d)(1), (2), (3) or (4) of this section. For facilities complying with paragraphs (d)(1), (2), or (3) of this section, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

(1) Affected facilities that have an annual capacity factor for coal and oil of 30 percent (0.30) or less and are subject to a federally enforceable permit limiting the operation of the affected facility to an annual capacity factor for coal and oil of 30 percent (0.30) or less;

(2) Affected facilities located in a noncontinental area; or

(3) Affected facilities combusting coal or oil, alone or in combination with any fuel, in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal and oil in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from the exhaust gases entering the duct burner; or

(4) The affected facility burns coke oven gas alone or in combination with natural gas or very low sulfur distillate oil.

(e) Except as provided in paragraph (f) of this section, compliance with the emission limits, fuel oil sulfur limits, and/or percent reduction requirements under this section are determined on a 30-day rolling average basis.

(f) Except as provided in paragraph (j)(2) of this section, compliance with the emission limits or fuel oil sulfur limits under this section is determined on a 24-hour average basis for affected facilities that (1) have a federally enforceable permit limiting the annual capacity factor for oil to 10 percent or less, (2) combust only very low sulfur oil, and (3) do not combust any other fuel.

(g) Except as provided in paragraph (i) of this section and §60.45b(a), the SO₂ emission limits and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(h) Reductions in the potential SO₂ emission rate through fuel pretreatment are not credited toward the percent reduction requirement under paragraph (c) of this section unless:

(1) Fuel pretreatment results in a 50 percent or greater reduction in potential SO₂ emissions and

(2) Emissions from the pretreated fuel (without combustion or post-combustion SO₂ control) are equal to or less than the emission limits specified in paragraph (c) of this section.

(i) An affected facility subject to paragraph (a), (b), or (c) of this section may combust very low sulfur oil or natural gas when the SO₂ control system is not being operated because of malfunction or maintenance of the SO₂ control system.

(j) Percent reduction requirements are not applicable to affected facilities combusting only very low sulfur oil. The owner or operator of an affected facility combusting very low sulfur oil shall demonstrate that the oil meets the definition of very low sulfur oil by: (1) Following the performance testing procedures as described in §60.45b(c) or §60.45b(d), and following the monitoring procedures as described in §60.47b(a) or §60.47b(b) to determine SO₂ emission rate or fuel oil sulfur content; or (2) maintaining fuel records as described in §60.49b(r).

(k)(1) Except as provided in paragraphs (k)(2), (k)(3), and (k)(4) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, natural gas, a mixture of these fuels, or a mixture of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that contain SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 8 percent (0.08) of the potential SO₂ emission rate (92 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input. For facilities complying with the percent reduction standard and paragraph (k)(3) of this section, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in paragraph (k) of this section. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

(2) Units firing only very low sulfur oil, gaseous fuel, a mixture of these fuels, or a mixture of these fuels with any other fuels with a potential SO₂ emission rate of 140 ng/J (0.32 lb/MMBtu) heat input or less are exempt from the SO₂ emissions limit in paragraph (k)(1) of this section.

(3) Units that are located in a noncontinental area and that combust coal, oil, or natural gas shall not discharge any gases that contain SO₂ in excess of 520 ng/J (1.2 lb/MMBtu) heat input if the affected facility combusts coal, or 215 ng/J (0.50 lb/MMBtu) heat input if the affected facility combusts oil or natural gas.

(4) As an alternative to meeting the requirements under paragraph (k)(1) of this section, modified facilities that combust coal or a mixture of coal with other fuels shall not cause to be discharged into the atmosphere any gases that contain SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO₂ emission rate (90 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input.

§60.43b Standard for particulate matter (PM).

(a) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005 that combusts coal or combusts mixtures of coal with other fuels, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 22 ng/J (0.051 lb/MMBtu) heat input, (i) If the affected facility combusts only coal, or

(ii) If the affected facility combusts coal and other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal and other fuels and has an annual capacity factor for the other fuels greater than 10 percent (0.10) and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(3) 86 ng/J (0.20 lb/MMBtu) heat input if the affected facility combusts coal or coal and other fuels and

(i) Has an annual capacity factor for coal or coal and other fuels of 30 percent (0.30) or less,

(ii) Has a maximum heat input capacity of 73 MW (250 MMBtu/hr) or less,

(iii) Has a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for coal or coal and other solid fuels, and

(iv) Construction of the affected facility commenced after June 19, 1984, and before November 25, 1986.

(4) An affected facility burning coke oven gas alone or in combination with other fuels not subject to a PM standard under §60.43b and not using a post-combustion technology (except a wet scrubber) for reducing PM or SO₂ emissions is not subject to the PM limits under §60.43b(a).

(b) On and after the date on which the performance test is completed or required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, and that combusts oil (or mixtures of oil with other fuels) and uses a conventional or emerging technology to reduce SO₂ emissions shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(c) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, and that combusts wood, or wood with other fuels, except coal, shall cause to be discharged from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor greater than 30 percent (0.30) for wood.

(2) 86 ng/J (0.20 lb/MMBtu) heat input if (i) The affected facility has an annual capacity factor of 30 percent (0.30) or less for wood;

(ii) Is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for wood; and

(iii) Has a maximum heat input capacity of 73 MW (250 MMBtu/hr) or less.

(d) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts municipal-type solid waste or mixtures of municipal-type solid waste with other fuels, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 43 ng/J (0.10 lb/MMBtu) heat input;

(i) If the affected facility combusts only municipal-type solid waste; or

(ii) If the affected facility combusts municipal-type solid waste and other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 86 ng/J (0.20 lb/MMBtu) heat input if the affected facility combusts municipal-type solid waste or municipal-type solid waste and other fuels; and

(i) Has an annual capacity factor for municipal-type solid waste and other fuels of 30 percent (0.30) or less;

(ii) Has a maximum heat input capacity of 73 MW (250 MMBtu/hr) or less;

(iii) Has a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for municipal-type solid waste, or municipal-type solid waste and other fuels; and

(iv) Construction of the affected facility commenced after June 19, 1984, but on or before November 25, 1986.

(e) For the purposes of this section, the annual capacity factor is determined by dividing the actual heat input to the steam generating unit during the calendar year from the combustion of coal, wood, or municipal-type solid waste, and other fuels, as applicable, by the potential heat input to the steam generating unit if the steam generating unit had been operated for 8,760 hours at the maximum heat input capacity.

(f) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. An owner or operator of an affected facility that elects to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and is subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less is exempt from the opacity standard specified in this paragraph.

(g) The PM and opacity standards apply at all times, except during periods of startup, shutdown, or malfunction.

(h)(1) Except as provided in paragraphs (h)(2), (h)(3), (h)(4), (h)(5), and (h)(6) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input,

(2) As an alternative to meeting the requirements of paragraph (h)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under §60.8, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:

(i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and

(ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

(3) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a maximum heat input capacity of 73 MW (250 MMBtu/h) or less shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(4) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a maximum heat input capacity greater than 73 MW (250 MMBtu/h) shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 37 ng/J (0.085 lb/MMBtu) heat input.

(5) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, an owner or operator of an affected facility not located in a noncontinental area that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.30 weight percent sulfur, coke oven gas, a mixture of these fuels, or either fuel (or a mixture of these fuels) in combination with other fuels not subject to a PM standard in §60.43b and not using a post-combustion technology (except a wet scrubber) to reduce SO₂ or PM emissions is not subject to the PM limits in (h)(1) of this section.

(6) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, an owner or operator of an affected facility located in a noncontinental area that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.5 weight percent sulfur, coke oven gas, a mixture of these fuels, or either fuel (or a mixture of these fuels) in combination with other fuels not subject to a PM standard in §60.43b and not using a post-combustion technology (except a wet scrubber) to reduce SO₂ or PM emissions is not subject to the PM limits in (h)(1) of this section.

§60.44b Standard for nitrogen oxides (NO_x).

(a) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that is subject to the provisions of this section and that combusts only coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO_x (expressed as NO₂) in excess of the following emission limits:

Fuel/steam generating unit type	Nitrogen oxide emission limits (expressed as NO ₂) heat input	
	ng/J	lb/MMBTu
(1) Natural gas and distillate oil, except (4):		
(i) Low heat release rate	43	0.10
(ii) High heat release rate	86	0.20
(2) Residual oil:		
(i) Low heat release rate	130	0.30
(ii) High heat release rate	170	0.40
(3) Coal:		
(i) Mass-feed stoker	210	0.50
(ii) Spreader stoker and fluidized bed combustion	260	0.60
(iii) Pulverized coal	300	0.70
(iv) Lignite, except (v)	260	0.60
(v) Lignite mined in North Dakota, South Dakota, or Montana and combusted in a slag tap furnace	340	0.80
(vi) Coal-derived synthetic fuels	210	0.50
(4) Duct burner used in a combined cycle system:		
(i) Natural gas and distillate oil	86	0.20
(ii) Residual oil	170	0.40

(b) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts mixtures of only coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO_x in excess of a limit determined by the use of the following formula:

$$E_n = \frac{(EL_g H_g) + (EL_o H_o) + (EL_c H_c)}{(H_g + H_o + H_c)}$$

Where:

E_n = NO_x emission limit (expressed as NO₂), ng/J (lb/MMBtu);

EL_g = Appropriate emission limit from paragraph (a)(1) for combustion of natural gas or distillate oil, ng/J (lb/MMBtu);

H_g = Heat input from combustion of natural gas or distillate oil, J (MMBtu);

EL_o = Appropriate emission limit from paragraph (a)(2) for combustion of residual oil, ng/J (lb/MMBtu);

H_o = Heat input from combustion of residual oil, J (MMBtu);

EL_c = Appropriate emission limit from paragraph (a)(3) for combustion of coal, ng/J (lb/MMBtu); and

H_c = Heat input from combustion of coal, J (MMBtu).

(c) Except as provided under paragraph (d) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts coal or oil, natural gas (or any combination of the three), and wood, or any other fuel shall cause to be discharged into the atmosphere any gases that contain NO_x in excess of the emission limit for the coal, oil, natural gas (or any combination of the three), combusted in the affected facility, as determined pursuant to paragraph (a) or (b) of this section. This standard does not apply to an affected facility that is subject to and in compliance with a federally enforceable requirement that limits operation of the affected facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, natural gas (or any combination of the three).

(d) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts natural gas and/or distillate oil with a potential SO₂ emissions rate of 26 ng/J (0.060 lb/MMBtu) or less with wood, municipal-type solid waste, or other solid fuel, except coal, shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO_x in excess of 130 ng/J (0.30 lb/MMBtu) heat input unless the affected facility has an annual capacity factor for natural gas, distillate oil, or a mixture of these fuels of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the affected facility to an annual capacity factor of 10 percent (0.10) or less for natural gas, distillate oil, or a mixture of these fuels.

(e) Except as provided under paragraph (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts only coal, oil, or natural gas with byproduct/waste shall cause to be discharged into the atmosphere any gases that contain NO_x in excess of the emission limit determined by the following formula unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the affected facility to an annual capacity factor of 10 percent (0.10) or less:

(f) Any owner or operator of an affected facility that combusts byproduct/waste with either natural gas or oil may petition the Administrator within 180 days of the initial startup of the affected facility to establish a NO_x emission limit that shall apply specifically to that affected facility when the byproduct/waste is combusted. The petition shall include sufficient and appropriate data, as determined by the Administrator, such as NO_x emissions from the affected facility, waste composition (including nitrogen content), and combustion conditions to allow the Administrator to confirm that the affected facility

is unable to comply with the emission limits in paragraph (e) of this section and to determine the appropriate emission limit for the affected facility.

(1) Any owner or operator of an affected facility petitioning for a facility-specific NO_x emission limit under this section shall:

(i) Demonstrate compliance with the emission limits for natural gas and distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) or (l)(1) of this section, as appropriate, by conducting a 30-day performance test as provided in §60.46b(e). During the performance test only natural gas, distillate oil, or residual oil shall be combusted in the affected facility; and

(ii) Demonstrate that the affected facility is unable to comply with the emission limits for natural gas and distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) or (l)(1) of this section, as appropriate, when gaseous or liquid byproduct/waste is combusted in the affected facility under the same conditions and using the same technological system of emission reduction applied when demonstrating compliance under paragraph (f)(1)(i) of this section.

(2) The NO_x emission limits for natural gas or distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) or (l)(1) of this section, as appropriate, shall be applicable to the affected facility until and unless the petition is approved by the Administrator. If the petition is approved by the Administrator, a facility-specific NO_x emission limit will be established at the NO_x emission level achievable when the affected facility is combusting oil or natural gas and byproduct/waste in a manner that the Administrator determines to be consistent with minimizing NO_x emissions. In lieu of amending this subpart, a letter will be sent to the facility describing the facility-specific NO_x limit. The facility shall use the compliance procedures detailed in the letter and make the letter available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.

(g) Any owner or operator of an affected facility that combusts hazardous waste (as defined by 40 CFR part 261 or 40 CFR part 761) with natural gas or oil may petition the Administrator within 180 days of the initial startup of the affected facility for a waiver from compliance with the NO_x emission limit that applies specifically to that affected facility. The petition must include sufficient and appropriate data, as determined by the Administrator, on NO_x emissions from the affected facility, waste destruction efficiencies, waste composition (including nitrogen content), the quantity of specific wastes to be combusted and combustion conditions to allow the Administrator to determine if the affected facility is able to comply with the NO_x emission limits required by this section. The owner or operator of the affected facility shall demonstrate that when hazardous waste is combusted in the affected facility, thermal destruction efficiency requirements for hazardous waste specified in an applicable federally enforceable requirement preclude compliance with the NO_x emission limits of this section. The NO_x emission limits for natural gas or distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) or (l)(1) of this section, as appropriate, are applicable to the affected facility until and unless the petition is approved by the Administrator. (See 40 CFR 761.70 for regulations applicable to the incineration of materials containing polychlorinated biphenyls (PCB's).) In lieu of amending this subpart, a letter will be sent to the facility describing the facility-specific NO_x limit. The facility shall use the compliance procedures detailed in the letter and make the letter available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.

(h) For purposes of paragraph (i) of this section, the NO_x standards under this section apply at all times including periods of startup, shutdown, or malfunction.

(i) Except as provided under paragraph (j) of this section, compliance with the emission limits under this section is determined on a 30-day rolling average basis.

(j) Compliance with the emission limits under this section is determined on a 24-hour average basis for the initial performance test and on a 3-hour average basis for subsequent performance tests for any affected facilities that:

(1) Combust, alone or in combination, only natural gas, distillate oil, or residual oil with a nitrogen content of 0.30 weight percent or less;

(2) Have a combined annual capacity factor of 10 percent or less for natural gas, distillate oil, and residual oil with a nitrogen content of 0.30 weight percent or less; and

(3) Are subject to a federally enforceable requirement limiting operation of the affected facility to the firing of natural gas, distillate oil, and/or residual oil with a nitrogen content of 0.30 weight percent or less and limiting operation of the affected facility to a combined annual capacity factor of 10 percent or less for natural gas, distillate oil, and residual oil with a nitrogen content of 0.30 weight percent or less.

(k) Affected facilities that meet the criteria described in paragraphs (j)(1), (2), and (3) of this section, and that have a heat input capacity of 73 MW (250 MMBtu/hr) or less, are not subject to the NO_x emission limits under this section.

(l) On and after the date on which the initial performance test is completed or is required to be completed under 60.8, whichever date is first, no owner or operator of an affected facility that commenced construction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO_x (expressed as NO₂) in excess of the following limits:

(1) 86 ng/J (0.20 lb/MMBtu) heat input if the affected facility combusts coal, oil, or natural gas (or any combination of the three), alone or with any other fuels. The affected facility is not subject to this limit if it is subject to and in compliance with a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, and natural gas (or any combination of the three); or

(2) If the affected facility has a low heat release rate and combusts natural gas or distillate oil in excess of 30 percent of the heat input on a 30-day rolling average from the combustion of all fuels, a limit determined by use of the following formula:

$$E_n = \frac{(0.10 \times H_{go}) + (0.20 \times H_r)}{(H_{go} + H_r)}$$

Where:

E_n = NO_x emission limit, (lb/MMBtu);

H_{go} = 30-day heat input from combustion of natural gas or distillate oil; and

H_r = 30-day heat input from combustion of any other fuel.

(3) After February 27, 2006, units where more than 10 percent of total annual output is electrical or mechanical may comply with an optional limit of 270 ng/J (2.1 lb/MWh) gross energy output, based on a 30-day rolling average. Units complying with this output-based limit must demonstrate compliance according to the procedures of §60.48Da(i) of subpart Da of this part, and must monitor emissions according to §60.49Da(c), (k), through (n) of subpart Da of this part.

§60.45b Compliance and performance test methods and procedures for sulfur dioxide.

(a) The SO₂ emission standards in §60.42b apply at all times. Facilities burning coke oven gas alone or in combination with any other gaseous fuels or distillate oil are allowed to exceed the limit 30 operating days per calendar year for SO₂ control system maintenance.

(b) In conducting the performance tests required under §60.8, the owner or operator shall use the methods and procedures in appendix A (including fuel certification and sampling) of this part or the methods and procedures as specified in this section, except as provided in §60.8(b). Section 60.8(f) does not apply to this section. The 30-day notice required in §60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(c) The owner or operator of an affected facility shall conduct performance tests to determine compliance with the percent of potential SO₂ emission rate (% P_s) and the SO₂ emission rate (E_s) pursuant to §60.42b following the procedures listed below, except as provided under paragraph (d) and (k) of this section.

(1) The initial performance test shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the SO₂ standards shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.

(2) If only coal, only oil, or a mixture of coal and oil is combusted, the following procedures are used:

(i) The procedures in Method 19 of appendix A-7 of this part are used to determine the hourly SO₂ emission rate (E_{ho}) and the 30-day average emission rate (E_{so}). The hourly averages used to compute the 30-day averages are obtained from the CEMS of §60.47b(a) or (b).

(ii) The percent of potential SO₂ emission rate (%P_s) emitted to the atmosphere is computed using the following formula:

$$\%P_s = 100 \left(1 - \frac{\%R_g}{100} \right) \left(1 - \frac{\%R_f}{100} \right)$$

Where:

%P_s = Potential SO₂ emission rate, percent;

%R_g = SO₂ removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent;
and

%R_f = SO₂ removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

(3) If coal or oil is combusted with other fuels, the same procedures required in paragraph (c)(2) of this section are used, except as provided in the following:

(i) An adjusted hourly SO₂ emission rate (E_{ho}^o) is used in Equation 19-19 of Method 19 of appendix A of this part to compute an adjusted 30-day average emission rate (E_{so}^o). The E_{ho}^o is computed using the following formula:

$$E_{ho}^o = \frac{E_{ho} - E_w(1 - X_1)}{X_1}$$

Where:

E_{ho}° = Adjusted hourly SO₂ emission rate, ng/J (lb/MMBtu);

E_{ho} = Hourly SO₂ emission rate, ng/J (lb/MMBtu);

E_w = SO₂ concentration in fuels other than coal and oil combusted in the affected facility, as determined by the fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted; and

X_k = Fraction of total heat input from fuel combustion derived from coal, oil, or coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(ii) To compute the percent of potential SO₂ emission rate (%P_s), an adjusted %R_g (%R_g^o) is computed from the adjusted E_{ao}° from paragraph (b)(3)(i) of this section and an adjusted average SO₂ inlet rate (E_{ai}°) using the following formula:

$$\%R_g^{\circ} = 100 \left(1.0 - \frac{E_{ao}^{\circ}}{E_{ai}^{\circ}} \right)$$

To compute E_{ai}° , an adjusted hourly SO₂ inlet rate (E_{ni}°) is used. The E_{ni}° is computed using the following formula:

$$E_{ni}^{\circ} = \frac{E_{hi} - E_w(1 - X_k)}{X_k}$$

Where:

E_{ni}° = Adjusted hourly SO₂ inlet rate, ng/J (lb/MMBtu); and

E_{hi} = Hourly SO₂ inlet rate, ng/J (lb/MMBtu).

(4) The owner or operator of an affected facility subject to paragraph (c)(3) of this section does not have to measure parameters E_w or X_k if the owner or operator elects to assume that $X_k = 1.0$. Owners or operators of affected facilities who assume $X_k = 1.0$ shall:

(i) Determine %P_s following the procedures in paragraph (c)(2) of this section; and

(ii) Sulfur dioxide emissions (E_s) are considered to be in compliance with SO₂ emission limits under §60.42b.

(5) The owner or operator of an affected facility that qualifies under the provisions of §60.42b(d) does not have to measure parameters E_w or X_k in paragraph (c)(3) of this section if the owner or operator of the affected facility elects to measure SO₂ emission rates of the coal or oil following the fuel sampling and analysis procedures in Method 19 of appendix A-7 of this part.

(d) Except as provided in paragraph (j) of this section, the owner or operator of an affected facility that combusts only very low sulfur oil, natural gas, or a mixture of these fuels, has an annual capacity factor for oil of 10 percent (0.10) or less, and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for oil of 10 percent (0.10) or less shall:

(1) Conduct the initial performance test over 24 consecutive steam generating unit operating hours at full load;

(2) Determine compliance with the standards after the initial performance test based on the arithmetic average of the hourly emissions data during each steam generating unit operating day if a CEMS is used, or based on a daily average if Method 6B of appendix A of this part or fuel sampling and analysis procedures under Method 19 of appendix A of this part are used.

(e) The owner or operator of an affected facility subject to §60.42b(d)(1) shall demonstrate the maximum design capacity of the steam generating unit by operating the facility at maximum capacity for 24 hours. This demonstration will be made during the initial performance test and a subsequent demonstration may be requested at any other time. If the 24-hour average firing rate for the affected facility is less than the maximum design capacity provided by the manufacturer of the affected facility, the 24-hour average firing rate shall be used to determine the capacity utilization rate for the affected facility, otherwise the maximum design capacity provided by the manufacturer is used.

(f) For the initial performance test required under §60.8, compliance with the SO₂ emission limits and percent reduction requirements under §60.42b is based on the average emission rates and the average percent reduction for SO₂ for the first 30 consecutive steam generating unit operating days, except as provided under paragraph (d) of this section. The initial performance test is the only test for which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first steam generating unit operating day of the 30 successive steam generating unit operating days is completed within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility. The boiler load during the 30-day period does not have to be the maximum design load, but must be representative of future operating conditions and include at least one 24-hour period at full load.

(g) After the initial performance test required under §60.8, compliance with the SO₂ emission limits and percent reduction requirements under §60.42b is based on the average emission rates and the average percent reduction for SO₂ for 30 successive steam generating unit operating days, except as provided under paragraph (d). A separate performance test is completed at the end of each steam generating unit operating day after the initial performance test, and a new 30-day average emission rate and percent reduction for SO₂ are calculated to show compliance with the standard.

(h) Except as provided under paragraph (i) of this section, the owner or operator of an affected facility shall use all valid SO₂ emissions data in calculating %P_s and E_{no} under paragraph (c), of this section whether or not the minimum emissions data requirements under §60.46b are achieved. All valid emissions data, including valid SO₂ emission data collected during periods of startup, shutdown and malfunction, shall be used in calculating %P_s and E_{no} pursuant to paragraph (c) of this section.

(i) During periods of malfunction or maintenance of the SO₂ control systems when oil is combusted as provided under §60.42b(i), emission data are not used to calculate %P_s or E_s under §60.42b(a), (b) or (c), however, the emissions data are used to determine compliance with the emission limit under §60.42b(i).

(j) The owner or operator of an affected facility that only combusts very low sulfur oil, natural gas, or a mixture of these fuels with any other fuels not subject to an SO₂ standard is not subject to the compliance and performance testing requirements of this section if the owner or operator obtains fuel receipts as described in §60.49b(r).

(k) The owner or operator of an affected facility seeking to demonstrate compliance in §§60.42b(d)(4), 60.42b(j), 60.42b(k)(2), and 60.42b(k)(3) (when not burning coal) shall follow the applicable procedures in §60.49b(r).

§60.46b Compliance and performance test methods and procedures for particulate matter and nitrogen oxides.

(a) The PM emission standards and opacity limits under §60.43b apply at all times except during periods of startup, shutdown, or malfunction. The NO_x emission standards under §60.44b apply at all times.

(b) Compliance with the PM emission standards under §60.43b shall be determined through performance testing as described in paragraph (d) of this section, except as provided in paragraph (i) of this section.

(c) Compliance with the NO_x emission standards under §60.44b shall be determined through performance testing under paragraph (e) or (f), or under paragraphs (g) and (h) of this section, as applicable.

(d) To determine compliance with the PM emission limits and opacity limits under §60.43b, the owner or operator of an affected facility shall conduct an initial performance test as required under §60.8, and shall conduct subsequent performance tests as requested by the Administrator, using the following procedures and reference methods:

(1) Method 3A or 3B of appendix A-2 of this part is used for gas analysis when applying Method 5 of appendix A-3 of this part or Method 17 of appendix A-6 of this part.

(2) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:

(i) Method 5 of appendix A of this part shall be used at affected facilities without wet flue gas desulfurization (FGD) systems; and

(ii) Method 17 of appendix A-6 of this part may be used at facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of sections 8.1 and 11.1 of Method 5B of appendix A-3 of this part may be used in Method 17 of appendix A-6 of this part only if it is used after a wet FGD system. Do not use Method 17 of appendix A-6 of this part after wet FGD systems if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part is to be used only after wet FGD systems.

(3) Method 1 of appendix A of this part is used to select the sampling site and the number of traverse sampling points. The sampling time for each run is at least 120 minutes and the minimum sampling volume is 1.7 dscm (60 dscf) except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(4) For Method 5 of appendix A of this part, the temperature of the sample gas in the probe and filter holder is monitored and is maintained at 160±14 °C (320±25 °F).

(5) For determination of PM emissions, the oxygen (O₂) or CO₂ sample is obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

(6) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rate expressed in ng/J heat input is determined using:

(i) The O₂ or CO₂ measurements and PM measurements obtained under this section;

(ii) The dry basis F factor; and

(iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.

(7) Method 9 of appendix A of this part is used for determining the opacity of stack emissions.

(e) To determine compliance with the emission limits for NO_x required under §60.44b, the owner or operator of an affected facility shall conduct the performance test as required under §60.8 using the continuous system for monitoring NO_x under §60.48(b).

(1) For the initial compliance test, NO_x from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NO_x emission standards under §60.44b. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

(2) Following the date on which the initial performance test is completed or is required to be completed in §60.8, whichever date comes first, the owner or operator of an affected facility which combusts coal (except as specified under §60.46b(e)(4)) or which combusts residual oil having a nitrogen content greater than 0.30 weight percent shall determine compliance with the NO_x emission standards in §60.44b on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated for each steam generating unit operating day as the average of all of the hourly NO_x emission data for the preceding 30 steam generating unit operating days.

(3) Following the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that has a heat input capacity greater than 73 MW (250 MMBtu/hr) and that combusts natural gas, distillate oil, or residual oil having a nitrogen content of 0.30 weight percent or less shall determine compliance with the NO_x standards under §60.44b on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_x emission data for the preceding 30 steam generating unit operating days.

(4) Following the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less and that combusts natural gas, distillate oil, gasified coal, or residual oil having a nitrogen content of 0.30 weight percent or less shall upon request determine compliance with the NO_x standards in §60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, NO_x emissions data collected pursuant to §60.48b(g)(1) or §60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NO_x emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_x emission data for the preceding 30 steam generating unit operating days.

(5) If the owner or operator of an affected facility that combusts residual oil does not sample and analyze the residual oil for nitrogen content, as specified in §60.49b(e), the requirements of §60.48b(g)(1) apply and the provisions of §60.48b(g)(2) are inapplicable.

(f) To determine compliance with the emissions limits for NO_x required by §60.44b(a)(4) or §60.44b(l) for duct burners used in combined cycle systems, either of the procedures described in paragraph (f)(1) or (2) of this section may be used:

(1) The owner or operator of an affected facility shall conduct the performance test required under §60.8 as follows:

(i) The emissions rate (E) of NO_x shall be computed using Equation 1 in this section:

$$E = E_{t_g} + \left(\frac{H_g}{H_b} \right) (E_{t_g} - E_{t_b}) \quad (\text{Eq.1})$$

Where:

E = Emissions rate of NO_x from the duct burner, ng/J (lb/MMBtu) heat input;

E_{sg} = Combined effluent emissions rate, in ng/J (lb/MMBtu) heat input using appropriate F factor as described in Method 19 of appendix A of this part;

H_g = Heat input rate to the combustion turbine, in J/hr (MMBtu/hr);

H_b = Heat input rate to the duct burner, in J/hr (MMBtu/hr); and

E_g = Emissions rate from the combustion turbine, in ng/J (lb/MMBtu) heat input calculated using appropriate F factor as described in Method 19 of appendix A of this part.

(ii) Method 7E of appendix A of this part or Method 320 of appendix A of part 63 shall be used to determine the NO_x concentrations. Method 3A or 3B of appendix A of this part shall be used to determine O₂ concentration.

(iii) The owner or operator shall identify and demonstrate to the Administrator's satisfaction suitable methods to determine the average hourly heat input rate to the combustion turbine and the average hourly heat input rate to the affected duct burner.

(iv) Compliance with the emissions limits under §60.44b(a)(4) or §60.44b(l) is determined by the three-run average (nominal 1-hour runs) for the initial and subsequent performance tests; or

(2) The owner or operator of an affected facility may elect to determine compliance on a 30-day rolling average basis by using the CEMS specified under §60.48b for measuring NO_x and O₂ and meet the requirements of §60.48b. The sampling site shall be located at the outlet from the steam generating unit. The NO_x emissions rate at the outlet from the steam generating unit shall constitute the NO_x emissions rate from the duct burner of the combined cycle system.

(g) The owner or operator of an affected facility described in §60.44b(j) or §60.44b(k) shall demonstrate the maximum heat input capacity of the steam generating unit by operating the facility at maximum capacity for 24 hours. The owner or operator of an affected facility shall determine the maximum heat input capacity using the heat loss method or the heat input method described in sections 5 and 7.3 of the ASME *Power Test Codes* 4.1 (incorporated by reference, see §60.17). This demonstration of maximum heat input capacity shall be made during the initial performance test for affected facilities that meet the criteria of §60.44b(j). It shall be made within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of each facility, for affected facilities meeting the criteria of §60.44b(k). Subsequent demonstrations may be required by the Administrator at any other time. If this demonstration indicates that the maximum heat input capacity of the affected facility is less than that stated by the manufacturer of the affected facility, the maximum heat input capacity determined during this demonstration shall be used to determine the capacity utilization rate for the affected facility. Otherwise, the maximum heat input capacity provided by the manufacturer is used.

(h) The owner or operator of an affected facility described in §60.44b(j) that has a heat input capacity greater than 73 MW (250 MMBtu/hr) shall:

(1) Conduct an initial performance test as required under §60.8 over a minimum of 24 consecutive steam generating unit operating hours at maximum heat input capacity to demonstrate compliance with the NO_x emission standards under §60.44b using Method 7, 7A, or 7E of appendix A of this part, Method 320 of appendix A of part 63 of this chapter, or other approved reference methods; and

(2) Conduct subsequent performance tests once per calendar year or every 400 hours of operation (whichever comes first) to demonstrate compliance with the NO_x emission standards under §60.44b over a minimum of 3 consecutive steam generating unit operating hours at maximum heat input capacity using Method 7, 7A, or 7E of appendix A of this part, Method 320 of appendix A of part 63, or other approved reference methods.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the PM limit in paragraphs §60.43b(a)(4) or §60.43b(h)(5) shall follow the applicable procedures in §60.49b(r).

(j) In place of PM testing with Method 5 or 5B of appendix A-3 of this part, or Method 17 of appendix A-6 of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall comply with the requirements specified in paragraphs (j)(1) through (j)(14) of this section.

(1) Notify the Administrator one month before starting use of the system.

(2) Notify the Administrator one month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with §60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of the CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under §60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (j) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.

(6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.

(7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraphs (j)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) [Reserved]

(8) The 1-hour arithmetic averages required under paragraph (j)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part.

(9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (j)(7) of this section are not met.

(10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.

(11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O₂ (or CO₂) data shall be collected concurrently (or within a 30-to 60-minute period) by both the continuous emission monitors and performance tests conducted using the following test methods.

(i) For PM, Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall be used; and

(ii) For O₂ (or CO₂), Method 3A or 3B of appendix A-2 of this part, as applicable shall be used.

(12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audits must be performed annually and Response Correlation Audits must be performed every 3 years.

(13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours per 30-day rolling average.

(14) As of January 1, 2012, and within 90 days after the date of completing each performance test, as defined in §60.8, conducted to demonstrate compliance with this subpart, you must submit relative accuracy test audit (*i.e.*, reference method) data and performance test (*i.e.*, compliance test) data, except opacity data, electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/ert_tool.html) or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5086, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9460, Feb. 16, 2012; 79 FR 11249, Feb. 27, 2014]

§60.47b Emission monitoring for sulfur dioxide.

(a) Except as provided in paragraphs (b) and (f) of this section, the owner or operator of an affected facility subject to the SO₂ standards in §60.42b shall install, calibrate, maintain, and operate CEMS for measuring SO₂ concentrations and either O₂ or CO₂ concentrations and shall record the output of the systems. For units complying with the percent reduction standard, the SO₂ and either O₂ or CO₂ concentrations shall both be monitored at the inlet and outlet of the SO₂ control device. If the owner or operator has installed and certified SO₂ and O₂ or CO₂ CEMS according to the requirements of §75.20(c)(1) of this chapter and appendix A to part 75 of this chapter, and is continuing to meet the ongoing quality assurance requirements of §75.21 of this chapter and appendix B to part 75 of this chapter, those CEMS may be used to meet the requirements of this section, provided that:

(1) When relative accuracy testing is conducted, SO₂ concentration data and CO₂ (or O₂) data are collected simultaneously; and

(2) In addition to meeting the applicable SO₂ and CO₂ (or O₂) relative accuracy specifications in Figure 2 of appendix B to part 75 of this chapter, the relative accuracy (RA) standard in section 13.2 of Performance Specification 2 in appendix B to this part is met when the RA is calculated on a lb/MMBtu basis; and

(3) The reporting requirements of §60.49b are met. SO₂ and CO₂ (or O₂) data used to meet the requirements of §60.49b shall not include substitute data values derived from the missing data procedures in subpart D of part 75 of this chapter, nor shall the SO₂ data have been bias adjusted according to the procedures of part 75 of this chapter.

(b) As an alternative to operating CEMS as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂ emissions and percent reduction by:

(1) Collecting coal or oil samples in an as-fired condition at the inlet to the steam generating unit and analyzing them for sulfur and heat content according to Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO₂ input rate, or

(2) Measuring SO₂ according to Method 6B of appendix A of this part at the inlet or outlet to the SO₂ control system. An initial stratification test is required to verify the adequacy of the sampling location for Method 6B of appendix A of this part. The stratification test shall consist of three paired runs of a suitable SO₂ and CO₂ measurement train operated at the candidate location and a second similar train operated according to the procedures in Section 3.2 and the applicable procedures in Section 7 of Performance Specification 2. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 or 3B of appendix A of this part or Methods 6C or Method 320 of appendix A of part 63 of this chapter and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part, 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent.

(3) A daily SO₂ emission rate, E_D, shall be determined using the procedure described in Method 6A of appendix A of this part, section 7.6.2 (Equation 6A-8) and stated in ng/J (lb/MMBtu) heat input.

(4) The mean 30-day emission rate is calculated using the daily measured values in ng/J (lb/MMBtu) for 30 successive steam generating unit operating days using equation 19-20 of Method 19 of appendix A of this part.

(c) The owner or operator of an affected facility shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator or the reference methods and procedures as described in paragraph (b) of this section.

(d) The 1-hour average SO₂ emission rates measured by the CEMS required by paragraph (a) of this section and required under §60.13(h) is expressed in ng/J or lb/MMBtu heat input and is used to calculate the average emission rates under §60.42(b). Each 1-hour average SO₂ emission rate must be based on 30 or more minutes of steam generating unit operation. The hourly averages shall be calculated according to §60.13(h)(2). Hourly SO₂ emission rates are not calculated if the affected facility is operated

less than 30 minutes in a given clock hour and are not counted toward determination of a steam generating unit operating day.

(e) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) Except as provided for in paragraph (e)(4) of this section, all CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.

(2) Except as provided for in paragraph (e)(4) of this section, quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.

(3) For affected facilities combusting coal or oil, alone or in combination with other fuels, the span value of the SO₂ CEMS at the inlet to the SO₂ control device is 125 percent of the maximum estimated hourly potential SO₂ emissions of the fuel combusted, and the span value of the CEMS at the outlet to the SO₂ control device is 50 percent of the maximum estimated hourly potential SO₂ emissions of the fuel combusted. Alternatively, SO₂ span values determined according to section 2.1.1 in appendix A to part 75 of this chapter may be used.

(4) As an alternative to meeting the requirements of paragraphs (e)(1) and (e)(2) of this section, the owner or operator may elect to implement the following alternative data accuracy assessment procedures:

(i) For all required CO₂ and O₂ monitors and for SO₂ and NO_x monitors with span values greater than or equal to 100 ppm, the daily calibration error test and calibration adjustment procedures described in sections 2.1.1 and 2.1.3 of appendix B to part 75 of this chapter may be followed instead of the CD assessment procedures in Procedure 1, section 4.1 of appendix F to this part.

(ii) For all required CO₂ and O₂ monitors and for SO₂ and NO_x monitors with span values greater than 30 ppm, quarterly linearity checks may be performed in accordance with section 2.2.1 of appendix B to part 75 of this chapter, instead of performing the cylinder gas audits (CGAs) described in Procedure 1, section 5.1.2 of appendix F to this part. If this option is selected: The frequency of the linearity checks shall be as specified in section 2.2.1 of appendix B to part 75 of this chapter; the applicable linearity specifications in section 3.2 of appendix A to part 75 of this chapter shall be met; the data validation and out-of-control criteria in section 2.2.3 of appendix B to part 75 of this chapter shall be followed instead of the excessive audit inaccuracy and out-of-control criteria in Procedure 1, section 5.2 of appendix F to this part; and the grace period provisions in section 2.2.4 of appendix B to part 75 of this chapter shall apply. For the purposes of data validation under this subpart, the cylinder gas audits described in Procedure 1, section 5.1.2 of appendix F to this part shall be performed for SO₂ and NO_x span values less than or equal to 30 ppm; and

(iii) For SO₂, CO₂, and O₂ monitoring systems and for NO_x emission rate monitoring systems, RATAs may be performed in accordance with section 2.3 of appendix B to part 75 of this chapter instead of following the procedures described in Procedure 1, section 5.1.1 of appendix F to this part. If this option is selected: The frequency of each RATA shall be as specified in section 2.3.1 of appendix B to part 75 of this chapter; the applicable relative accuracy specifications shown in Figure 2 in appendix B to part 75 of this chapter shall be met; the data validation and out-of-control criteria in section 2.3.2 of appendix B to part 75 of this chapter shall be followed instead of the excessive audit inaccuracy and out-of-control criteria in Procedure 1, section 5.2 of appendix F to this part; and the grace period provisions in section 2.3.3 of appendix B to part 75 of this chapter shall apply. For the purposes of data validation under this subpart, the relative accuracy specification in section 13.2 of Performance Specification 2 in appendix B to this part shall be met on a lb/MMBtu basis for SO₂ (regardless of the SO₂ emission level

during the RATA), and for NO_x when the average NO_x emission rate measured by the reference method during the RATA is less than 0.100 lb/MMBtu.

(f) The owner or operator of an affected facility that combusts very low sulfur oil or is demonstrating compliance under §60.45b(k) is not subject to the emission monitoring requirements under paragraph (a) of this section if the owner or operator maintains fuel records as described in §60.49b(r).

[72 FR 32742, June 13, 2007, as amended at 74 FR 5087, Jan. 28, 2009; 79 FR 11249, Feb. 27, 2014]

§60.48b Emission monitoring for particulate matter and nitrogen oxides.

(a) Except as provided in paragraph (j) of this section, the owner or operator of an affected facility subject to the opacity standard under §60.43b shall install, calibrate, maintain, and operate a continuous opacity monitoring systems (COMS) for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard under §60.43b and meeting the conditions under paragraphs (j)(1), (2), (3), (4), (5), or (6) of this section who elects not to use a COMS shall conduct a performance test using Method 9 of appendix A-4 of this part and the procedures in §60.11 to demonstrate compliance with the applicable limit in §60.43b by April 29, 2011, within 45 days of stopping use of an existing COMS, or within 180 days after initial startup of the facility, whichever is later, and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. The observation period for Method 9 of appendix A-4 of this part performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.

(1) Except as provided in paragraph (a)(2) and (a)(3) of this section, the owner or operator shall conduct subsequent Method 9 of appendix A-4 of this part performance tests using the procedures in paragraph (a) of this section according to the applicable schedule in paragraphs (a)(1)(i) through (a)(1)(iv) of this section, as determined by the most recent Method 9 of appendix A-4 of this part performance test results.

(i) If no visible emissions are observed, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;

(ii) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;

(iii) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; or

(iv) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.

(2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 of this part performance tests, elect to perform subsequent

monitoring using Method 22 of appendix A-7 of this part according to the procedures specified in paragraphs (a)(2)(i) and (ii) of this section.

(i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A-7 of this part and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (*i.e.*, 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (*i.e.*, 90 seconds per 30 minute period), the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (*i.e.*, 90 seconds) or conduct a new Method 9 of appendix A-4 of this part performance test using the procedures in paragraph (a) of this section within 45 calendar days according to the requirements in §60.46d(d)(7).

(ii) If no visible emissions are observed for 10 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.

(3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS "Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems." This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.

(b) Except as provided under paragraphs (g), (h), and (i) of this section, the owner or operator of an affected facility subject to a NO_x standard under §60.44b shall comply with either paragraphs (b)(1) or (b)(2) of this section.

(1) Install, calibrate, maintain, and operate CEMS for measuring NO_x and O₂ (or CO₂) emissions discharged to the atmosphere, and shall record the output of the system; or

(2) If the owner or operator has installed a NO_x emission rate CEMS to meet the requirements of part 75 of this chapter and is continuing to meet the ongoing requirements of part 75 of this chapter, that CEMS may be used to meet the requirements of this section, except that the owner or operator shall also meet the requirements of §60.49b. Data reported to meet the requirements of §60.49b shall not include data substituted using the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter.

(c) The CEMS required under paragraph (b) of this section shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(d) The 1-hour average NO_x emission rates measured by the continuous NO_x monitor required by paragraph (b) of this section and required under §60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.44b. The 1-hour averages shall be calculated using the data points required under §60.13(h)(2).

(e) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.

(1) For affected facilities combusting coal, wood or municipal-type solid waste, the span value for a COMS shall be between 60 and 80 percent.

(2) For affected facilities combusting coal, oil, or natural gas, the span value for NO_x is determined using one of the following procedures:

(i) Except as provided under paragraph (e)(2)(ii) of this section, NO_x span values shall be determined as follows:

Fuel	Span values for NO_x (ppm)
Natural gas	500.
Oil	500.
Coal	1,000.
Mixtures	$500(x + y) + 1,000z.$

Where:

x = Fraction of total heat input derived from natural gas;

y = Fraction of total heat input derived from oil; and

z = Fraction of total heat input derived from coal.

(ii) As an alternative to meeting the requirements of paragraph (e)(2)(i) of this section, the owner or operator of an affected facility may elect to use the NO_x span values determined according to section 2.1.2 in appendix A to part 75 of this chapter.

(3) All span values computed under paragraph (e)(2)(i) of this section for combusting mixtures of regulated fuels are rounded to the nearest 500 ppm. Span values computed under paragraph (e)(2)(ii) of this section shall be rounded off according to section 2.1.2 in appendix A to part 75 of this chapter.

(f) When NO_x emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 of appendix A of this part, Method 7A of appendix A of this part, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

(g) The owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less, and that has an annual capacity factor for residual oil having a nitrogen content of 0.30 weight percent or less, natural gas, distillate oil, gasified coal, or any mixture of these fuels, greater than 10 percent (0.10) shall:

(1) Comply with the provisions of paragraphs (b), (c), (d), (e)(2), (e)(3), and (f) of this section; or

(2) Monitor steam generating unit operating conditions and predict NO_x emission rates as specified in a plan submitted pursuant to §60.49b(c).

(h) The owner or operator of a duct burner, as described in §60.41b, that is subject to the NO_x standards in §60.44b(a)(4), §60.44b(e), or §60.44b(l) is not required to install or operate a continuous emissions monitoring system to measure NO_x emissions.

(i) The owner or operator of an affected facility described in §60.44b(j) or §60.44b(k) is not required to install or operate a CEMS for measuring NO_x emissions.

(j) The owner or operator of an affected facility that meets the conditions in either paragraph (j)(1), (2), (3), (4), (5), (6), or (7) of this section is not required to install or operate a CEMS if:

(1) The affected facility uses a PM CEMS to monitor PM emissions; or

(2) The affected facility burns only liquid (excluding residual oil) or gaseous fuels with potential SO₂ emissions rates of 26 ng/J (0.060 lb/MMBtu) or less and does not use a post-combustion technology to reduce SO₂ or PM emissions. The owner or operator must maintain fuel records of the sulfur content of the fuels burned, as described under §60.49b(r); or

(3) The affected facility burns coke oven gas alone or in combination with fuels meeting the criteria in paragraph (j)(2) of this section and does not use a post-combustion technology to reduce SO₂ or PM emissions; or

(4) The affected facility does not use post-combustion technology (except a wet scrubber) for reducing PM, SO₂, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.30 weight percent sulfur, and is operated such that emissions of CO to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a steam generating unit operating day average basis. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (j)(4)(i) through (iv) of this section; or

(i) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (j)(4)(i)(A) through (D) of this section.

(A) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in §60.58b(i)(3) of subpart Eb of this part.

(B) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(C) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. The 1-hour averages are calculated using the data points required in §60.13(h)(2).

(D) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.

(ii) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by

calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.

(iii) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(iv) You must record the CO measurements and calculations performed according to paragraph (j)(4) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(5) The affected facility uses a bag leak detection system to monitor the performance of a fabric filter (baghouse) according to the most current requirements in section §60.48Da of this part; or

(6) The affected facility uses an ESP as the primary PM control device and uses an ESP predictive model to monitor the performance of the ESP developed in accordance and operated according to the most current requirements in section §60.48Da of this part; or

(7) The affected facility burns only gaseous fuels or fuel oils that contain less than or equal to 0.30 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard.

(k) Owners or operators complying with the PM emission limit by using a PM CEMS must calibrate, maintain, operate, and record the output of the system for PM emissions discharged to the atmosphere as specified in §60.46b(j). The CEMS specified in paragraph §60.46b(j) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(l) An owner or operator of an affected facility that is subject to an opacity standard under §60.43b(f) is not required to operate a COMS provided that the unit burns only gaseous fuels and/or liquid fuels (excluding residue oil) with a potential SO₂ emissions rate no greater than 26 ng/J (0.060 lb/MMBtu), and the unit operates according to a written site-specific monitoring plan approved by the permitting authority is not required to operate a COMS. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard. For testing performed as part of this site-specific monitoring plan, the permitting authority may require as an alternative to the notification and reporting requirements specified in §§60.8 and 60.11 that the owner or operator submit any deviations with the excess emissions report required under §60.49b(h).

[72 FR 32742, June 13, 2007, as amended at 74 FR 5087, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9460, Feb. 16, 2012]

§60.49b Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility;

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42b(d)(1), §60.43b(a)(2), (a)(3)(iii), (c)(2)(ii), (d)(2)(iii), §60.44b(c), (d), (e), (i), (j), (k), §60.45b(d), (g), §60.46b(h), or §60.48b(i);

(3) The annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired; and

(4) Notification that an emerging technology will be used for controlling emissions of SO₂. The Administrator will examine the description of the emerging technology and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42b(a) unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO₂, PM, and/or NO_x emission limits under §§60.42b, 60.43b, and 60.44b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in appendix B of this part. The owner or operator of each affected facility described in §60.44b(j) or §60.44b(k) shall submit to the Administrator the maximum heat input capacity data from the demonstration of the maximum heat input capacity of the affected facility.

(c) The owner or operator of each affected facility subject to the NO_x standard in §60.44b who seeks to demonstrate compliance with those standards through the monitoring of steam generating unit operating conditions in the provisions of §60.48b(g)(2) shall submit to the Administrator for approval a plan that identifies the operating conditions to be monitored in §60.48b(g)(2) and the records to be maintained in §60.49b(g). This plan shall be submitted to the Administrator for approval within 360 days of the initial startup of the affected facility. An affected facility burning coke oven gas alone or in combination with other gaseous fuels or distillate oil shall submit this plan to the Administrator for approval within 360 days of the initial startup of the affected facility or by November 30, 2009, whichever date comes later. If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan. The plan shall:

(1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NO_x emission rates (*i.e.*, ng/J or lbs/MMBtu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (*i.e.*, the ratio of primary air to secondary and/or tertiary air) and the level of excess air (*i.e.*, flue gas O₂ level);

(2) Include the data and information that the owner or operator used to identify the relationship between NO_x emission rates and these operating conditions; and

(3) Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under §60.49b(g).

(d) Except as provided in paragraph (d)(2) of this section, the owner or operator of an affected facility shall record and maintain records as specified in paragraph (d)(1) of this section.

(1) The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. The

annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

(2) As an alternative to meeting the requirements of paragraph (d)(1) of this section, the owner or operator of an affected facility that is subject to a federally enforceable permit restricting fuel use to a single fuel such that the facility is not required to continuously monitor any emissions (excluding opacity) or parameters indicative of emissions may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(e) For an affected facility that combusts residual oil and meets the criteria under §60.46b(e)(4), §60.44b(j), or (k), the owner or operator shall maintain records of the nitrogen content of the residual oil combusted in the affected facility and calculate the average fuel nitrogen content for the reporting period. The nitrogen content shall be determined using ASTM Method D4629 (incorporated by reference, see §60.17), or fuel suppliers. If residual oil blends are being combusted, fuel nitrogen specifications may be prorated based on the ratio of residual oils of different nitrogen content in the fuel blend.

(f) For an affected facility subject to the opacity standard in §60.43b, the owner or operator shall maintain records of opacity. In addition, an owner or operator that elects to monitor emissions according to the requirements in §60.48b(a) shall maintain records according to the requirements specified in paragraphs (f)(1) through (3) of this section, as applicable to the visible emissions monitoring method used.

(1) For each performance test conducted using Method 9 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (f)(1)(i) through (iii) of this section.

(i) Dates and time intervals of all opacity observation periods;

(ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

(iii) Copies of all visible emission observer opacity field data sheets;

(2) For each performance test conducted using Method 22 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (f)(2)(i) through (iv) of this section.

(i) Dates and time intervals of all visible emissions observation periods;

(ii) Name and affiliation for each visible emission observer participating in the performance test;

(iii) Copies of all visible emission observer opacity field data sheets; and

(iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.

(3) For each digital opacity compliance system, the owner or operator shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator.

(g) Except as provided under paragraph (p) of this section, the owner or operator of an affected facility subject to the NO_x standards under §60.44b shall maintain records of the following information for each steam generating unit operating day:

(1) Calendar date;

(2) The average hourly NO_x emission rates (expressed as NO₂) (ng/J or lb/MMBtu heat input) measured or predicted;

(3) The 30-day average NO_x emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;

(4) Identification of the steam generating unit operating days when the calculated 30-day average NO_x emission rates are in excess of the NO_x emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;

(5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;

(6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;

(7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;

(8) Identification of the times when the pollutant concentration exceeded full span of the CEMS;

(9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and

(10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.

(h) The owner or operator of any affected facility in any category listed in paragraphs (h)(1) or (2) of this section is required to submit excess emission reports for any excess emissions that occurred during the reporting period.

(1) Any affected facility subject to the opacity standards in §60.43b(f) or to the operating parameter monitoring requirements in §60.13(i)(1).

(2) Any affected facility that is subject to the NO_x standard of §60.44b, and that:

(i) Combusts natural gas, distillate oil, gasified coal, or residual oil with a nitrogen content of 0.3 weight percent or less; or

(ii) Has a heat input capacity of 73 MW (250 MMBtu/hr) or less and is required to monitor NO_x emissions on a continuous basis under §60.48b(g)(1) or steam generating unit operating conditions under §60.48b(g)(2).

(3) For the purpose of §60.43b, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under §60.43b(f).

(4) For purposes of §60.48b(g)(1), excess emissions are defined as any calculated 30-day rolling average NO_x emission rate, as determined under §60.46b(e), that exceeds the applicable emission limits in §60.44b.

(i) The owner or operator of any affected facility subject to the continuous monitoring requirements for NO_x under §60.48(b) shall submit reports containing the information recorded under paragraph (g) of this section.

(j) The owner or operator of any affected facility subject to the SO₂ standards under §60.42b shall submit reports.

(k) For each affected facility subject to the compliance and performance testing requirements of §60.45b and the reporting requirement in paragraph (j) of this section, the following information shall be reported to the Administrator:

(1) Calendar dates covered in the reporting period;

(2) Each 30-day average SO₂ emission rate (ng/J or lb/MMBtu heat input) measured during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken; For an exceedance due to maintenance of the SO₂ control system covered in paragraph 60.45b(a), the report shall identify the days on which the maintenance was performed and a description of the maintenance;

(3) Each 30-day average percent reduction in SO₂ emissions calculated during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken;

(4) Identification of the steam generating unit operating days that coal or oil was combusted and for which SO₂ or diluent (O₂ or CO₂) data have not been obtained by an approved method for at least 75 percent of the operating hours in the steam generating unit operating day; justification for not obtaining sufficient data; and description of corrective action taken;

(5) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit;

(6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;

(7) Identification of times when hourly averages have been obtained based on manual sampling methods;

(8) Identification of the times when the pollutant concentration exceeded full span of the CEMS;

(9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3;

(10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part; and

(11) The annual capacity factor of each fired as provided under paragraph (d) of this section.

(l) For each affected facility subject to the compliance and performance testing requirements of §60.45b(d) and the reporting requirements of paragraph (j) of this section, the following information shall be reported to the Administrator:

(1) Calendar dates when the facility was in operation during the reporting period;

(2) The 24-hour average SO₂ emission rate measured for each steam generating unit operating day during the reporting period that coal or oil was combusted, ending in the last 24-hour period in the quarter; reasons for noncompliance with the emission standards; and a description of corrective actions taken;

(3) Identification of the steam generating unit operating days that coal or oil was combusted for which SO₂ or diluent (O₂ or CO₂) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and description of corrective action taken;

(4) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit;

(5) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;

(6) Identification of times when hourly averages have been obtained based on manual sampling methods;

(7) Identification of the times when the pollutant concentration exceeded full span of the CEMS;

(8) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and

(9) Results of daily CEMS drift tests and quarterly accuracy assessments as required under Procedure 1 of appendix F 1 of this part. If the owner or operator elects to implement the alternative data assessment procedures described in §§60.47b(e)(4)(i) through (e)(4)(iii), each data assessment report shall include a summary of the results of all of the RATAs, linearity checks, CGAs, and calibration error or drift assessments required by §§60.47b(e)(4)(i) through (e)(4)(iii).

(m) For each affected facility subject to the SO₂ standards in §60.42(b) for which the minimum amount of data required in §60.47b(c) were not obtained during the reporting period, the following information is reported to the Administrator in addition to that required under paragraph (k) of this section:

(1) The number of hourly averages available for outlet emission rates and inlet emission rates;

(2) The standard deviation of hourly averages for outlet emission rates and inlet emission rates, as determined in Method 19 of appendix A of this part, section 7;

(3) The lower confidence limit for the mean outlet emission rate and the upper confidence limit for the mean inlet emission rate, as calculated in Method 19 of appendix A of this part, section 7; and

(4) The ratio of the lower confidence limit for the mean outlet emission rate and the allowable emission rate, as determined in Method 19 of appendix A of this part, section 7.

(n) If a percent removal efficiency by fuel pretreatment (*i.e.*, %R_i) is used to determine the overall percent reduction (*i.e.*, %R_o) under §60.45b, the owner or operator of the affected facility shall submit a signed statement with the report.

(1) Indicating what removal efficiency by fuel pretreatment (*i.e.*, %R_i) was credited during the reporting period;

(2) Listing the quantity, heat content, and date each pre-treated fuel shipment was received during the reporting period, the name and location of the fuel pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the reporting period;

(3) Documenting the transport of the fuel from the fuel pretreatment facility to the steam generating unit; and

(4) Including a signed statement from the owner or operator of the fuel pretreatment facility certifying that the percent removal efficiency achieved by fuel pretreatment was determined in accordance with the provisions of Method 19 of appendix A of this part and listing the heat content and sulfur content of each fuel before and after fuel pretreatment.

(o) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of 2 years following the date of such record.

(p) The owner or operator of an affected facility described in §60.44b(j) or (k) shall maintain records of the following information for each steam generating unit operating day:

(1) Calendar date;

(2) The number of hours of operation; and

(3) A record of the hourly steam load.

(q) The owner or operator of an affected facility described in §60.44b(j) or §60.44b(k) shall submit to the Administrator a report containing:

(1) The annual capacity factor over the previous 12 months;

(2) The average fuel nitrogen content during the reporting period, if residual oil was fired; and

(3) If the affected facility meets the criteria described in §60.44b(j), the results of any NO_x emission tests required during the reporting period, the hours of operation during the reporting period, and the hours of operation since the last NO_x emission test.

(r) The owner or operator of an affected facility who elects to use the fuel based compliance alternatives in §60.42b or §60.43b shall either:

(1) The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil, natural gas, wood, a mixture of these fuels, or any of these fuels (or a mixture of these fuels) in combination with other fuels that are known to contain an insignificant amount of sulfur in §60.42b(j) or §60.42b(k) shall obtain and maintain at the affected facility fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the oil meets the definition of distillate oil and gaseous fuel meets the definition of natural gas as defined in §60.41b and the applicable sulfur limit. For the purposes of this section, the distillate oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted

to the Administrator certifying that only very low sulfur oil meeting this definition, natural gas, wood, and/or other fuels that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period; or

(2) The owner or operator of an affected facility who elects to demonstrate compliance based on fuel analysis in §60.42b or §60.43b shall develop and submit a site-specific fuel analysis plan to the Administrator for review and approval no later than 60 days before the date you intend to demonstrate compliance. Each fuel analysis plan shall include a minimum initial requirement of weekly testing and each analysis report shall contain, at a minimum, the following information:

(i) The potential sulfur emissions rate of the representative fuel mixture in ng/J heat input;

(ii) The method used to determine the potential sulfur emissions rate of each constituent of the mixture. For distillate oil and natural gas a fuel receipt or tariff sheet is acceptable;

(iii) The ratio of different fuels in the mixture; and

(iv) The owner or operator can petition the Administrator to approve monthly or quarterly sampling in place of weekly sampling.

(s) Facility specific NO_x standard for Cytec Industries Fortier Plant's C.AOG incinerator located in Westwego, Louisiana:

(1) *Definitions.*

Oxidation zone is defined as the portion of the C.AOG incinerator that extends from the inlet of the oxidizing zone combustion air to the outlet gas stack.

Reducing zone is defined as the portion of the C.AOG incinerator that extends from the burner section to the inlet of the oxidizing zone combustion air.

Total inlet air is defined as the total amount of air introduced into the C.AOG incinerator for combustion of natural gas and chemical by-product waste and is equal to the sum of the air flow into the reducing zone and the air flow into the oxidation zone.

(2) *Standard for nitrogen oxides.* (i) When fossil fuel alone is combusted, the NO_x emission limit for fossil fuel in §60.44b(a) applies.

(ii) When natural gas and chemical by-product waste are simultaneously combusted, the NO_x emission limit is 289 ng/J (0.67 lb/MMBtu) and a maximum of 81 percent of the total inlet air provided for combustion shall be provided to the reducing zone of the C.AOG incinerator.

(3) *Emission monitoring.* (i) The percent of total inlet air provided to the reducing zone shall be determined at least every 15 minutes by measuring the air flow of all the air entering the reducing zone and the air flow of all the air entering the oxidation zone, and compliance with the percentage of total inlet air that is provided to the reducing zone shall be determined on a 3-hour average basis.

(ii) The NO_x emission limit shall be determined by the compliance and performance test methods and procedures for NO_x in §60.46b(i).

(iii) The monitoring of the NO_x emission limit shall be performed in accordance with §60.48b.

(4) *Reporting and recordkeeping requirements.* (i) The owner or operator of the C.AOG incinerator shall submit a report on any excursions from the limits required by paragraph (a)(2) of this section to the Administrator with the quarterly report required by paragraph (i) of this section.

(ii) The owner or operator of the C.AOG incinerator shall keep records of the monitoring required by paragraph (a)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner or operator of the C.AOG incinerator shall perform all the applicable reporting and recordkeeping requirements of this section.

(t) Facility-specific NO_x standard for Rohm and Haas Kentucky Incorporated's Boiler No. 100 located in Louisville, Kentucky:

(1) *Definitions.*

Air ratio control damper is defined as the part of the low NO_x burner that is adjusted to control the split of total combustion air delivered to the reducing and oxidation portions of the combustion flame.

Flue gas recirculation line is defined as the part of Boiler No. 100 that recirculates a portion of the boiler flue gas back into the combustion air.

(2) *Standard for nitrogen oxides.* (i) When fossil fuel alone is combusted, the NO_x emission limit for fossil fuel in §60.44b(a) applies.

(ii) When fossil fuel and chemical by-product waste are simultaneously combusted, the NO_x emission limit is 473 ng/J (1.1 lb/MMBtu), and the air ratio control damper tee handle shall be at a minimum of 5 inches (12.7 centimeters) out of the boiler, and the flue gas recirculation line shall be operated at a minimum of 10 percent open as indicated by its valve opening position indicator.

(3) *Emission monitoring for nitrogen oxides.* (i) The air ratio control damper tee handle setting and the flue gas recirculation line valve opening position indicator setting shall be recorded during each 8-hour operating shift.

(ii) The NO_x emission limit shall be determined by the compliance and performance test methods and procedures for NO_x in §60.46b.

(iii) The monitoring of the NO_x emission limit shall be performed in accordance with §60.48b.

(4) *Reporting and recordkeeping requirements.* (i) The owner or operator of Boiler No. 100 shall submit a report on any excursions from the limits required by paragraph (b)(2) of this section to the Administrator with the quarterly report required by §60.49b(i).

(ii) The owner or operator of Boiler No. 100 shall keep records of the monitoring required by paragraph (b)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner or operator of Boiler No. 100 shall perform all the applicable reporting and recordkeeping requirements of §60.49b.

(u) *Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia.* (1) This paragraph (u) applies only to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, in Elkton, Virginia ("site") and only to the natural gas-fired boilers installed as part of the powerhouse conversion required pursuant to 40 CFR 52.2454(g). The

requirements of this paragraph shall apply, and the requirements of §§60.40b through 60.49b(t) shall not apply, to the natural gas-fired boilers installed pursuant to 40 CFR 52.2454(g).

(i) The site shall equip the natural gas-fired boilers with low NO_x technology.

(ii) The site shall install, calibrate, maintain, and operate a continuous monitoring and recording system for measuring NO_x emissions discharged to the atmosphere and opacity using a continuous emissions monitoring system or a predictive emissions monitoring system.

(iii) Within 180 days of the completion of the powerhouse conversion, as required by 40 CFR 52.2454, the site shall perform a performance test to quantify criteria pollutant emissions.

(2) [Reserved]

(v) The owner or operator of an affected facility may submit electronic quarterly reports for SO₂ and/or NO_x and/or opacity in lieu of submitting the written reports required under paragraphs (h), (i), (j), (k) or (l) of this section. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.

(w) The reporting period for the reports required under this subpart is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

(x) Facility-specific NO_x standard for Weyerhaeuser Company's No. 2 Power Boiler located in New Bern, North Carolina:

(1) *Standard for nitrogen oxides.* (i) When fossil fuel alone is combusted, the NO_x emission limit for fossil fuel in §60.44b(a) applies.

(ii) When fossil fuel and chemical by-product waste are simultaneously combusted, the NO_x emission limit is 215 ng/J (0.5 lb/MMBtu).

(2) *Emission monitoring for nitrogen oxides.* (i) The NO_x emissions shall be determined by the compliance and performance test methods and procedures for NO_x in §60.46b.

(ii) The monitoring of the NO_x emissions shall be performed in accordance with §60.48b.

(3) *Reporting and recordkeeping requirements.* (i) The owner or operator of the No. 2 Power Boiler shall submit a report on any excursions from the limits required by paragraph (x)(2) of this section to the Administrator with the quarterly report required by §60.49b(i).

(ii) The owner or operator of the No. 2 Power Boiler shall keep records of the monitoring required by paragraph (x)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner or operator of the No. 2 Power Boiler shall perform all the applicable reporting and recordkeeping requirements of §60.49b.

(y) Facility-specific NO_x standard for INEOS USA's AOGI located in Lima, Ohio:

(1) *Standard for NO_x*. (i) When fossil fuel alone is combusted, the NO_x emission limit for fossil fuel in §60.44b(a) applies.

(ii) When fossil fuel and chemical byproduct/waste are simultaneously combusted, the NO_x emission limit is 645 ng/J (1.5 lb/MMBtu).

(2) *Emission monitoring for NO_x*. (i) The NO_x emissions shall be determined by the compliance and performance test methods and procedures for NO_x in §60.46b.

(ii) The monitoring of the NO_x emissions shall be performed in accordance with §60.48b.

(3) *Reporting and recordkeeping requirements*. (i) The owner or operator of the AOGI shall submit a report on any excursions from the limits required by paragraph (y)(2) of this section to the Administrator with the quarterly report required by paragraph (i) of this section.

(ii) The owner or operator of the AOGI shall keep records of the monitoring required by paragraph (y)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner or operator of the AOGI shall perform all the applicable reporting and recordkeeping requirements of this section.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5089, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

Appendix D

40 C.F.R. Part 60, Subpart III-*Standards of Performance for Stationary Compression Ignition
Combustion Engine*

SOURCE: 71 FR 39172, July 11, 2006, unless otherwise noted.

WHAT THIS SUBPART COVERS

§60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

(i) 2007 or later, for engines that are not fire pump engines;

(ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

(i) Manufactured after April 1, 2006, and are not fire pump engines, or

(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.

(4) The provisions of §60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

(e) Owners and operators of facilities with CI ICE that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as

meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

EMISSION STANDARDS FOR MANUFACTURERS

§60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 through 2010 model year non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(c) Stationary CI internal combustion engine manufacturers must certify their 2011 model year and later non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same maximum engine power.

(d) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2007 model year through 2012 non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(3) Their 2013 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(e) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards and other requirements for new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.110, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(f) Notwithstanding the requirements in paragraphs (a) through (c) of this section, stationary non-emergency CI ICE identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 1 to 40 CFR 1042.1 identifies 40 CFR part 1042 as being applicable, 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:

- (1) Areas of Alaska not accessible by the Federal Aid Highway System (FAHS); and
- (2) Marine offshore installations.

(g) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (e) of this section that are applicable to the model year, maximum engine power, and displacement of the reconstructed stationary CI ICE.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

§60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.

(1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(2) For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.

(c) [Reserved]

(d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.

(e) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2007 model year through 2012 emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder;

(3) Their 2013 model year emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder; and

(4) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(f) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE to the certification emission standards and other requirements applicable to Tier 3 new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power less than 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(g) Notwithstanding the requirements in paragraphs (a) through (d) of this section, stationary emergency CI internal combustion engines identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 2 to 40 CFR 1042.101 identifies Tier 3 standards as being applicable, the requirements applicable to Tier 3 engines in 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:

(1) Areas of Alaska not accessible by the FAHS; and

(2) Marine offshore installations.

(h) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (f) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed emergency stationary CI ICE.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011]

§60.4203 How long must my engines meet the emission standards if I am a manufacturer of stationary CI internal combustion engines?

Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in §§60.4201 and 60.4202 during the certified emissions life of the engines.

[76 FR 37968, June 28, 2011]

EMISSION STANDARDS FOR OWNERS AND OPERATORS

§60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in §60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

(c) Owners and operators of non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the following requirements:

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 grams per kilowatt-hour (g/KW-hr) (12.7 grams per horsepower-hr (g/HP-hr)) when maximum engine speed is less than 130 revolutions per minute (rpm);

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012 and before January 1, 2016, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) For engines installed on or after January 1, 2016, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $9.0 \cdot n^{-0.20}$ g/KW-hr ($6.7 \cdot n^{-0.20}$ g/HP-hr) where n (maximum engine speed) is 130 or more but less than 2,000 rpm; and

(iii) 2.0 g/KW-hr (1.5 g/HP-hr) where maximum engine speed is greater than or equal to 2,000 rpm.

(4) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

(d) Owners and operators of non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the not-to-exceed (NTE) standards as indicated in §60.4212.

(e) Owners and operators of any modified or reconstructed non-emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed non-emergency stationary CI ICE that are specified in paragraphs (a) through (d) of this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011]

§60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to this subpart. Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

(d) Owners and operators of emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in this section.

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/kW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

(e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in §60.4212.

(f) Owners and operators of any modified or reconstructed emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in paragraphs (a) through (e) of this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 over the entire life of the engine.

[76 FR 37969, June 28, 2011]

FUEL REQUIREMENTS FOR OWNERS AND OPERATORS

§60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

(c) [Reserved]

(d) Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder are no longer subject to the requirements of paragraph (a) of this section, and must use fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm).

(e) Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011; 78 FR 6695, Jan. 30, 2013]

OTHER REQUIREMENTS FOR OWNERS AND OPERATORS

§60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) After December 31, 2018, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 600 KW (804 HP) and less than 2,000 KW (2,680 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.

(h) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.

(i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

COMPLIANCE REQUIREMENTS

§60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in §60.4201(a) through (c) and §60.4202(a), (b) and (d) using the certification procedures required in 40 CFR part 89, subpart B, or 40 CFR part 1039, subpart C, as applicable, and must test their engines as specified in those parts. For the purposes of this subpart, engines certified to the standards in table 1 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89. For the purposes of this subpart, engines certified to the standards in table 4 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.

(b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in §60.4201(d) and (e) and §60.4202(e) and (f) using the certification procedures required in 40 CFR part 94, subpart C, or 40 CFR part 1042, subpart C, as applicable, and must test their engines as specified in 40 CFR part 94 or 1042, as applicable.

(c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 1039.125, 1039.130, and 1039.135, and 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 89, 40 CFR part 94 or 40 CFR part 1042 for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to paragraphs (c)(1) through (3) of this section.

(1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.

(2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the year listed in table 3 to this subpart) must be labeled according to paragraphs (c)(2)(i) through (iii) of this section:

(i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.

(ii) Stationary CI internal combustion engines that meet Tier 1 requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier 1 requirements (or requirements for fire pumps) of this subpart.

(iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier 1 requirements of this subpart, or fire pumps engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S. If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.

(3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.

(i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate.

(ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate, but the words "stationary" must be included instead of "nonroad" or "marine" on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.

(iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.

(d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR parts 89, 94, 1039 or 1042 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts.

(e) Manufacturers of engine families discussed in paragraph (d) of this section may meet the labeling requirements referred to in paragraph (c) of this section for stationary CI ICE by either adding a separate label containing the information required in paragraph (c) of this section or by adding the words "and stationary" after the word "nonroad" or "marine," as appropriate, to the label.

(f) Starting with the model years shown in table 5 to this subpart, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in §60.4202 but does not meet all the emission standards for non-emergency engines in §60.4201. The label must be added according to the labeling requirements specified in 40 CFR 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.

(g) Manufacturers of fire pump engines may use the test cycle in table 6 to this subpart for testing fire pump engines and may test at the NFPA certified nameplate HP, provided that the engine is labeled as "Fire Pump Applications Only".

(h) Engine manufacturers, including importers, may introduce into commerce uncertified engines or engines certified to earlier standards that were manufactured before the new or changed standards took effect until inventories are depleted, as long as such engines are part of normal inventory. For example, if the engine manufacturers' normal industry practice is to keep on hand a one-month supply of engines based on its projected sales, and a new tier of standards starts to apply for the 2009 model year, the engine manufacturer may manufacture engines based on the normal inventory requirements late in the 2008 model year, and sell those engines for installation. The engine manufacturer may not circumvent the provisions of §60.4201 or §60.4202 by stockpiling engines that are built before new or changed standards take effect. Stockpiling of such engines beyond normal industry practice is a violation of this subpart.

(i) The replacement engine provisions of 40 CFR 89.1003(b)(7), 40 CFR 94.1103(b)(3), 40 CFR 94.1103(b)(4) and 40 CFR 1068.240 are applicable to stationary CI engines replacing existing equipment that is less than 15 years old.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.

(d) If you are an owner or operator and must comply with the emission standards specified in §60.4204(c) or §60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.

(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213.

(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

(i) Identification of the specific parameters you propose to monitor continuously;

(ii) A discussion of the relationship between these parameters and NO_x and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NO_x and PM emissions;

(iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in §60.4213.

(e) If you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(e) or §60.4205(f), you must demonstrate compliance according to one of the methods specified in paragraphs (e)(1) or (2) of this section.

(1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in §60.4204(e) or §60.4205(f), as applicable.

(2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in §60.4212 or §60.4213, as appropriate. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

(f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

(g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

(1) If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

(2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

(3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37970, June 28, 2011; 78 FR 6695, Jan. 30, 2013]

TESTING REQUIREMENTS FOR OWNERS AND OPERATORS

§60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \quad (\text{Eq. 1})$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

§60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted according to the requirements in §60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c).

(c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must last at least 1 hour.

(d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.

(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 2})$$

Where:

C_i = concentration of NO_x or PM at the control device inlet,

C_o = concentration of NO_x or PM at the control device outlet, and

R = percent reduction of NO_x or PM emissions.

(2) You must normalize the NO_x or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O_2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO_2) using the procedures described in paragraph (d)(3) of this section.

$$C_{\text{adj}} = C_d \frac{5.9}{20.9 - \% \text{O}_2} \quad (\text{Eq. 3})$$

Where:

C_{adj} = Calculated NO_x or PM concentration adjusted to 15 percent O_2 .

C_d = Measured concentration of NO_x or PM, uncorrected.

5.9 = 20.9 percent O_2 - 15 percent O_2 , the defined O_2 correction value, percent.

$\% \text{O}_2$ = Measured O_2 concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent O_2 and CO_2 concentration is measured in lieu of O_2 concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209}{F_c} \quad (\text{Eq. 4})$$

Where:

F_o = Fuel factor based on the ratio of O_2 volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is O_2 , percent/100.

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dm^3/J (dscf/ 10^6 Btu).

F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dm^3/J (dscf/ 10^6 Btu).

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2 , as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \quad (\text{Eq. 5})$$

Where:

X_{CO_2} = CO_2 correction factor, percent.

5.9 = 20.9 percent O_2 - 15 percent O_2 , the defined O_2 correction value, percent.

(iii) Calculate the NO_x and PM gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \quad (\text{Eq. 6})$$

Where:

C_{adj} = Calculated NO_x or PM concentration adjusted to 15 percent O_2 .

C_d = Measured concentration of NO_x or PM, uncorrected.

$\%CO_2$ = Measured CO_2 concentration, dry basis, percent.

(e) To determine compliance with the NO_x mass per unit output emission limitation, convert the concentration of NO_x in the engine exhaust using Equation 7 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{KW\text{-hour}} \quad (\text{Eq. 7})$$

Where:

ER = Emission rate in grams per KW-hour.

C_d = Measured NO_x concentration in ppm.

1.912×10^{-3} = Conversion constant for ppm NO_x to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{KW\text{-hour}} \quad (\text{Eq 8})$$

Where:

ER = Emission rate in grams per KW-hour.

C_{adj} = Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

NOTIFICATION, REPORTS, AND RECORDS FOR OWNERS AND OPERATORS

§60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.

(1) Submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.

(i) Name and address of the owner or operator;

(ii) The address of the affected source;

(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment; and

(v) Fuel used.

(2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

(i) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(ii) Maintenance conducted on the engine.

(iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

(d) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in §60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §60.4211(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purposes specified in §60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not

available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4.

[71 FR 39172, July 11, 2006, as amended at 78 FR 6696, Jan. 30, 2013]

SPECIAL REQUIREMENTS

§60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

(a) Stationary CI ICE with a displacement of less than 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §§60.4202 and 60.4205.

(b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in §60.4207.

(c) Stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the following emission standards:

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

§60.4216 What requirements must I meet for engines used in Alaska?

(a) Prior to December 1, 2010, owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder located in areas of Alaska not accessible by the FAHS should refer to 40 CFR part 69 to determine the diesel fuel requirements applicable to such engines.

(b) Except as indicated in paragraph (c) of this section, manufacturers, owners and operators of stationary CI ICE with a displacement of less than 10 liters per cylinder located in areas of Alaska not accessible by the FAHS may meet the requirements of this subpart by manufacturing and installing engines meeting the requirements of 40 CFR parts 94 or 1042, as appropriate, rather than the otherwise applicable requirements of 40 CFR parts 89 and 1039, as indicated in sections §§60.4201(f) and 60.4202(g) of this subpart.

(c) Manufacturers, owners and operators of stationary CI ICE that are located in areas of Alaska not accessible by the FAHS may choose to meet the applicable emission standards for emergency engines in §§60.4202 and 60.4205, and not those for non-emergency engines in §60.4201 and §60.4204, except that for 2014 model year and later non-emergency CI ICE, the owner or operator of any such engine that was not certified as meeting Tier 4 PM standards, must meet the applicable requirements for PM in §§60.4201 and 60.4204 or install a PM emission control device that achieves PM emission reductions of 85 percent, or 60 percent for engines with a displacement of greater than or equal to 30 liters per cylinder, compared to engine-out emissions.

(d) The provisions of §60.4207 do not apply to owners and operators of pre-2014 model year stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS.

(e) The provisions of §60.4208(a) do not apply to owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS until after December 31, 2009.

(f) The provisions of this section and §60.4207 do not prevent owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS from using fuels mixed with used lubricating oil, in volumes of up to 1.75 percent of the total fuel. The sulfur content of the used lubricating oil must be less than 200 parts per million. The used lubricating oil must meet the on-specification levels and properties for used oil in 40 CFR 279.11.

[76 FR 37971, June 28, 2011]

§60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

Owners and operators of stationary CI ICE that do not use diesel fuel may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in §60.4204 or §60.4205 using such fuels and that use of such fuel is appropriate and reasonably necessary, considering cost, energy, technical feasibility, human health and environmental, and other factors, for the operation of the engine.

[76 FR 37972, June 28, 2011]

GENERAL PROVISIONS

§60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

DEFINITIONS

§60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for certified emissions life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Date of manufacture means one of the following things:

(1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.

(2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.

(3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary ICE must comply with the requirements specified in §60.4211(f) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in §60.4211(f), then it is not considered to be an emergency stationary ICE under this subpart.

(1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc.

(2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §60.4211(f).

(3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §60.4211(f)(2)(ii) or (iii) and §60.4211(f)(3)(i).

Engine manufacturer means the manufacturer of the engine. See the definition of “manufacturer” in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Freshly manufactured engine means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced.

Installed means the engine is placed and secured at the location where it is intended to be operated.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means the calendar year in which an engine is manufactured (see “date of manufacture”), except as follows:

(1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see “date of manufacture”), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see “date of manufacture”).

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel

at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011; 78 FR 6696, Jan. 30, 2013]

Table 1 to Subpart IIII of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder

[As stated in §§60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

Maximum engine power	Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007-2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)				
	NMHC + NO _x	HC	NO _x	CO	PM
KW<8 (HP<11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)
8≤KW<19 (11≤HP<25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)
19≤KW<37 (25≤HP<50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)
37≤KW<56 (50≤HP<75)			9.2 (6.9)		
56≤KW<75 (75≤HP<100)			9.2 (6.9)		
75≤KW<130 (100≤HP<175)			9.2 (6.9)		
130≤KW<225 (175≤HP<300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
450≤KW≤560 (600≤HP≤750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

KW>560 (HP>750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
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Table 2 to Subpart IIII of Part 60—Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder

[As stated in §60.4202(a)(1), you must comply with the following emission standards]

Engine power	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)			
	Model year(s)	NO _x + NMHC	CO	PM
KW<8 (HP<11)	2008 +	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)
8≤KW<19 (11≤HP<25)	2008 +	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)
19≤KW<37 (25≤HP<50)	2008 +	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)

Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines

As stated in §60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:

Engine power	Starting model year engine manufacturers must certify new stationary fire pump engines according to §60.4202(d) ¹
KW<75 (HP<100)	2011
75≤KW<130 (100≤HP<175)	2010
130≤KW≤560 (175≤HP≤750)	2009
KW>560 (HP>750)	2008

¹Manufacturers of fire pump stationary CI ICE with a maximum engine power greater than or equal to 37 kW (50 HP) and less than 450 kW (600 HP) and a rated speed of greater than 2,650 revolutions per

minute (rpm) are not required to certify such engines until three model years following the model year indicated in this Table 3 for engines in the applicable engine power category.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011]

Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

[As stated in §§60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

Maximum engine power	Model year(s)	NMHC + NO _x	CO	PM
KW<8 (HP<11)	2010 and earlier	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011 +	7.5 (5.6)		0.40 (0.30)
8≤KW<19 (11≤HP<25)	2010 and earlier	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)
	2011 +	7.5 (5.6)		0.40 (0.30)
19≤KW<37 (25≤HP<50)	2010 and earlier	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)
	2011 +	7.5 (5.6)		0.30 (0.22)
37≤KW<56 (50≤HP<75)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011 + ¹	4.7 (3.5)		0.40 (0.30)
56≤KW<75 (75≤HP<100)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011 + ¹	4.7 (3.5)		0.40 (0.30)
75≤KW<130 (100≤HP<175)	2009 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2010 + ²	4.0 (3.0)		0.30 (0.22)
130≤KW<225 (175≤HP<300)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009 + ³	4.0 (3.0)		0.20 (0.15)
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009 + ³	4.0 (3.0)		0.20 (0.15)
450≤KW≤560 (600≤HP≤750)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009 +	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008 +	6.4 (4.8)		0.20 (0.15)

¹For model years 2011-2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

²For model years 2010-2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

³In model years 2009-2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

Table 5 to Subpart IIII of Part 60—Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

[You must comply with the labeling requirements in §60.4210(f) and the recordkeeping requirements in §60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine power	Starting model year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

Table 6 to Subpart IIII of Part 60—Optional 3-Mode Test Cycle for Stationary Fire Pump Engines

[As stated in §60.4210(g), manufacturers of fire pump engines may use the following test cycle for testing fire pump engines:]

Mode No.	Engine speed ¹	Torque (percent) ²	Weighting factors
1	Rated	100	0.30
2	Rated	75	0.50
3	Rated	50	0.20

¹Engine speed: ±2 percent of point.

²Torque: NFPA certified nameplate HP for 100 percent point. All points should be ±2 percent of engine percent load value.

Table 7 to Subpart IIII of Part 60—Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥30 Liters per Cylinder

As stated in §60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of ≥30 liters per cylinder:

Each	Complying with the requirement to	You must	Using	According to the following requirements
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<p>1. Stationary CI internal combustion engine with a displacement of ≥ 30 liters per cylinder</p>	<p>a. Reduce NO_x emissions by 90 percent or more;</p>	<p>i. Select the sampling port location and number/location of traverse points at the inlet and outlet of the control device;</p>		<p>(a) For NO_x, O_2, and moisture measurement, ducts ≤ 6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤ 12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter <i>and</i> the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.</p>
		<p>ii. Measure O_2 at the inlet and outlet of the control device;</p>	<p>(1) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2</p>	<p>(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for NO_x concentration.</p>
		<p>iii. If necessary, measure moisture content at the inlet and outlet of the control device; and</p>	<p>(2) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see §60.17)</p>	<p>(c) Measurements to determine moisture content must be made at the same time as the measurements for NO_x concentration.</p>
		<p>iv. Measure NO_x at</p>	<p>(3) Method 7E</p>	<p>(d) NO_x concentration</p>

		the inlet and outlet of the control device.	of 40 CFR part 60, appendix A-4, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see §60.17)	must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	b. Limit the concentration of NO _x in the stationary CI internal combustion engine exhaust.	i. Select the sampling port location and number/location of traverse points at the exhaust of the stationary internal combustion engine;		(a) For NO _x , O ₂ , and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter <i>and</i> the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
		ii. Determine the O ₂ concentration of the stationary internal combustion engine exhaust at the sampling port location;	(1) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurement for NO _x concentration.

		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(2) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see §60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurement for NO _x concentration.
		iv. Measure NO _x at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device.	(3) Method 7E of 40 CFR part 60, appendix A-4, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see §60.17)	(d) NO _x concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	c. Reduce PM emissions by 60 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O ₂ at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(3) Method 4 of 40 CFR part 60, appendix A-3	(c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the inlet and outlet of the control device.	(4) Method 5 of 40 CFR part 60, appendix A-3	(d) PM concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer

				runs.
	d. Limit the concentration of PM in the stationary CI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O ₂ concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(3) Method 4 of 40 CFR part 60, appendix A-3	(c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the exhaust of the stationary internal combustion engine.	(4) Method 5 of 40 CFR part 60, appendix A-3	(d) PM concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

[79 FR 11251, Feb. 27, 2014]

Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII

[As stated in §60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4219.

§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4214(a).
§60.8	Performance tests	Yes	Except that §60.8 only applies to stationary CI ICE with a displacement of (≥ 30 liters per cylinder and engines that are not certified.
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart III.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	Yes	Except that §60.13 only applies to stationary CI ICE with a displacement of (≥ 30 liters per cylinder.
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	

Appendix E

40 C.F.R. Part 63 Subpart ZZZZ- *NESHAP for Reciprocating Internal Combustion Engines*

Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

SOURCE: 69 FR 33506, June 15, 2004, unless otherwise noted.

WHAT THIS SUBPART COVERS

§63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

§63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

(f) The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in §63.6675, which includes operating according to the provisions specified in §63.6640(f).

(1) Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

(2) Existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

(3) Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008; 78 FR 6700, Jan. 30, 2013]

§63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) *Existing stationary RICE.*

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(f) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

(i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR

part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

- (1) A new or reconstructed stationary RICE located at an area source;
- (2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;
- (4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;
- (6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013]

§63.6595 When do I have to comply with this subpart?

(a) *Affected sources.* (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply

with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 78 FR 6701, Jan. 30, 2013]

EMISSION AND OPERATING LIMITATIONS

§63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or

reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

(d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

§63.6601 What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

§63.6602 What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations and other requirements in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

[78 FR 6701, Jan. 30, 2013]

§63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meets either paragraph (b)(1) or (2) of this section, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. Existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meet either paragraph (b)(1) or (2) of this section must meet the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart.

(1) The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS).

(2) The stationary RICE is located at an area source that meets paragraphs (b)(2)(i), (ii), and (iii) of this section.

(i) The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.

(ii) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.

(iii) The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.

(c) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located on an offshore vessel that is an area source of HAP and is a nonroad vehicle that is an Outer Continental Shelf (OCS) source as defined in 40 CFR 55.2, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. You must meet all of the following management practices:

(1) Change oil every 1,000 hours of operation or annually, whichever comes first. Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement.

(2) Inspect and clean air filters every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(3) Inspect fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(4) Inspect all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

(d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and that is subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018, you may until January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018, choose to comply with the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart instead of the applicable emission limitations in Table 2d, operating limitations in Table 2b, and crankcase ventilation system requirements in §63.6625(g). You must comply with the emission limitations in Table 2d and operating limitations in Table 2b that apply for non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP

emissions by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018. You must also comply with the crankcase ventilation system requirements in §63.6625(g) by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018.

(e) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart IIII instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions.

(f) An existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP must meet the definition of remote stationary RICE in §63.6675 on the initial compliance date for the engine, October 19, 2013, in order to be considered a remote stationary RICE under this subpart. Owners and operators of existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in §63.6675 of this subpart as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6701, Jan. 30, 2013]

§63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?

(a) If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.

(b) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(c) Beginning January 1, 2015, if you own or operate a new emergency CI stationary RICE with a site rating of more than 500 brake HP and a displacement of less than 30 liters per cylinder located at a major source of HAP that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(d) Existing CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, at area sources in areas of Alaska that meet either §63.6603(b)(1) or

§63.6603(b)(2), or are on offshore vessels that meet §63.6603(c) are exempt from the requirements of this section.

[78 FR 6702, Jan. 30, 2013]

GENERAL COMPLIANCE REQUIREMENTS

§63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 9675, Mar. 3, 2010, as amended at 78 FR 6702, Jan. 30, 2013]

TESTING AND INITIAL COMPLIANCE REQUIREMENTS

§63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3605, Jan. 18, 2008]

§63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 51589, Aug. 20, 2010]

§63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?

If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[75 FR 9676, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010]

§63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

§63.6620 What performance tests and other procedures must I use?

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in paragraphs (b)(1) through (4) of this section.

(1) Non-emergency 4SRB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(2) New non-emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP located at a major source of HAP emissions.

(3) New non-emergency 2SLB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(4) New non-emergency CI stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(c) [Reserved]

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in this subpart.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 1})$$

Where:

C_i = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,

C_o = concentration of CO, THC, or formaldehyde at the control device outlet, and

R = percent reduction of CO, THC, or formaldehyde emissions.

(2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO₂). If pollutant concentrations are to be corrected to 15 percent oxygen and CO₂ concentration is measured in lieu of oxygen concentration measurement, a CO₂ correction factor is needed. Calculate the CO₂ correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209 F_d}{F_c} \quad (\text{Eq. 2})$$

Where:

F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO₂ volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm³/J (dscf/10⁶ Btu).

F_c = Ratio of the volume of CO₂ produced to the gross calorific value of the fuel from Method 19, dsm³/J (dscf/10⁶ Btu)

(ii) Calculate the CO₂ correction factor for correcting measurement data to 15 percent O₂, as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \quad (\text{Eq. 3})$$

Where:

X_{CO₂} = CO₂ correction factor, percent.

5.9 = 20.9 percent O₂—15 percent O₂, the defined O₂ correction value, percent.

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O₂ using CO₂ as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \quad (\text{Eq. 4})$$

Where:

C_{adj} = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O₂.

C_d = Measured concentration of CO, THC, or formaldehyde, uncorrected.

X_{CO₂} = CO₂ correction factor, percent.

%CO₂ = Measured CO₂ concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored

thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.*, operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.*, wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the

engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9676, Mar. 3, 2010; 78 FR 6702, Jan. 30, 2013]

§63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either O₂ or CO₂ according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO₂ concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.

(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d). As specified in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (5) of this section in your site-specific monitoring plan.

(i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

(ii) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;

(iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;

(iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and

(v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).

(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.

(3) The CPMS must collect data at least once every 15 minutes (see also §63.6635).

(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

(6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

(1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;

(2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;

(5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;

(6) An existing non-emergency, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.

(7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and

(10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet §63.6603(c) do not have to meet the requirements of this paragraph (g).

(1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits

are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6703, Jan. 30, 2013]

§63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

(d) Non-emergency 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more can demonstrate initial compliance with the formaldehyde emission limit by testing for THC instead of formaldehyde. The testing must be conducted according to the requirements in Table 4 of this subpart. The average reduction of emissions of THC determined from the performance test must be equal to or greater than 30 percent.

(e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least three test runs.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O₂ using one of the O₂ measurement methods specified in Table 4 of this subpart. Measurements to determine O₂ concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O₂ emissions simultaneously at the inlet and outlet of the control device.

[69 FR 33506, June 15, 2004, as amended at 78 FR 6704, Jan. 30, 2013]

CONTINUOUS COMPLIANCE REQUIREMENTS

§63.6635 How do I monitor and collect data to demonstrate continuous compliance?

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

[69 FR 33506, June 15, 2004, as amended at 76 FR 12867, Mar. 9, 2011]

§63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test.

When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least one test run.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O₂ using one of the O₂ measurement methods specified in Table 4 of this subpart. Measurements to determine O₂ concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O₂ emissions simultaneously at the inlet and outlet of the control device.

(7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a

site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak

shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6704, Jan. 30, 2013]

NOTIFICATIONS, REPORTS, AND RECORDS

§63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

(1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

(b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

(i) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and subject to an enforceable state or local standard requiring engine replacement and you intend to meet management practices rather than emission limits, as specified in §63.6603(d), you must submit a notification by March 3, 2013, stating that you intend to use the provision in §63.6603(d) and identifying the state or local regulation that the engine is subject to.

§63.6650 What reports must I submit and when?

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

(h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

(ix) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010; 78 FR 6705, Jan. 30, 2013]

§63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

(1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 78 FR 6706, Jan. 30, 2013]

§63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

OTHER REQUIREMENTS AND INFORMATION

§63.6665 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

§63.6670 Who implements and enforces this subpart?

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in §63.6600 under §63.6(g).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in §63.6610(b).

§63.6675 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

Alaska Railbelt Grid means the service areas of the six regulated public utilities that extend from Fairbanks to Anchorage and the Kenai Peninsula. These utilities are Golden Valley Electric Association; Chugach Electric Association; Matanuska Electric Association; Homer Electric Association; Anchorage Municipal Light & Power; and the City of Seward Electric System.

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

Backup power for renewable energy means an engine that provides backup power to a facility that generates electricity from renewable energy resources, as that term is defined in Alaska Statute 42.45.045(l)(5) (incorporated by reference, see §63.14).

Black start engine means an engine whose only purpose is to start up a combustion turbine.

CAA means the Clean Air Act (42 U.S.C. 7401 *et seq.*, as amended by Public Law 101-549, 104 Stat. 2399).

Commercial emergency stationary RICE means an emergency stationary RICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor's offices, and sports and performing arts facilities.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless of whether or not such failure is permitted by this subpart.

(4) Fails to satisfy the general duty to minimize emissions established by §63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties (e.g. biodiesel) that is suitable for use in compression ignition engines.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO₂.

Dual-fuel engine means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in §63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in §63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

(1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

(2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §63.6640(f).

(3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §63.6640(f)(2)(ii) or (iii) and §63.6640(f)(4)(i) or (ii).

Engine startup means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Gaseous fuel means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Glycol dehydration unit means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes "rich" glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The "lean" glycol is then recycled.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

Institutional emergency stationary RICE means an emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

ISO standard day conditions means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO₂.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

Major Source, as used in this subpart, shall have the same meaning as in §63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NO_x) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_x, CO, and volatile organic compounds (VOC) into CO₂, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (*i.e.*, remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Peaking unit or engine means any standby engine intended for use during periods of high demand that are not emergencies.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in §63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to §63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to §63.1270(a)(2).

Production field facility means those oil and gas production facilities located prior to the point of custody transfer.

Production well means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C₃H₈.

Remote stationary RICE means stationary RICE meeting any of the following criteria:

(1) Stationary RICE located in an offshore area that is beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters.

(2) Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (2)(i) and (ii) of this definition.

(i) A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.

(ii) The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.

(iii) For purposes of this paragraph (2), the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 meters) of the pipeline segment providing power for equipment on a pipeline segment are part of the pipeline segment. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline, or the storage of gas. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

(3) Stationary RICE that are not located on gas pipelines and that have 5 or fewer buildings intended for human occupancy and no buildings with four or more stories within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

Residential emergency stationary RICE means an emergency stationary RICE used in residential establishments such as homes or apartment buildings.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NO_x (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition means relating to either: A gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart P P P P P of this part, that tests stationary RICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart Z Z Z Z.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 76 FR 12867, Mar. 9, 2011; 78 FR 6706, Jan. 30, 2013]

Table 1a to Subpart Z Z Z Z of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations at 100 percent load plus or minus 10 percent for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 4SRB	a. Reduce formaldehyde emissions by 76	Minimize the engine's time spent at idle

stationary RICE	percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. ¹
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂	

¹ Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9679, Mar. 3, 2010, as amended at 75 FR 51592, Aug. 20, 2010]

Table 1b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed SI 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600, 63.6603, 63.6630 and 63.6640, you must comply with the following operating limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
1. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂ and using NSCR;	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F. ¹
2. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or	Comply with any operating limitations approved by the Administrator.
existing, new and reconstructed 4SRB stationary	

RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂ and not using NSCR.	
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¹Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6706, Jan. 30, 2013]

Table 2a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

For each ...	You must meet the following emission limitation, except during periods of startup ...	During periods of startup you must . . .
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O ₂ . If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O ₂ until June 15, 2007	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. ¹
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O ₂	
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O ₂	

¹Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9680, Mar. 3, 2010]

Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and CI Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions, Existing CI Stationary RICE >500 HP

As stated in §§63.6600, 63.6601, 63.6603, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions; new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions; and existing CI stationary RICE >500 HP:

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
<p>1. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.</p>	<p>a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.¹</p>
<p>2. Existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst</p>	<p>a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and</p>
	<p>b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.¹</p>
<p>3. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB</p>	<p>Comply with any operating limitations approved by the Administrator.</p>

stationary RICE \geq 250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and not using an oxidation catalyst; and	
New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE \geq 250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; and	
existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst.	

¹Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6707, Jan. 30, 2013]

Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE \leq 500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600, 63.6602, and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE located at a major source of HAP emissions and existing spark ignition stationary RICE \leq 500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Emergency stationary CI RICE and black start stationary CI RICE ¹	a. Change oil and filter every 500 hours of operation or annually, whichever comes first. ² b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. ³

	operation or annually, whichever comes first, and replace as necessary. ³	
2. Non-Emergency, non-black start stationary CI RICE <100 HP	<p>a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first.²</p> <p>b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;</p> <p>c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.³</p>	
3. Non-Emergency, non-black start CI stationary RICE $100 \leq \text{HP} \leq 300$ HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O ₂ .	
4. Non-Emergency, non-black start CI stationary RICE $300 < \text{HP} \leq 500$	<p>a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O₂; or</p> <p>b. Reduce CO emissions by 70 percent or more.</p>	
5. Non-Emergency, non-black start stationary CI RICE >500 HP	<p>a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O₂; or</p> <p>b. Reduce CO emissions by 70 percent or more.</p>	
6. Emergency stationary SI RICE and black start stationary SI RICE. ¹	<p>a. Change oil and filter every 500 hours of operation or annually, whichever comes first;²</p> <p>b. Inspect spark plugs every 1,000 hours of operation or annually,</p>	

	whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. ³	
7. Non-Emergency, non-black start stationary SI RICE <100 HP that are not 2SLB stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; ² b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary;	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary. ³	
8. Non-Emergency, non-black start 2SLB stationary SI RICE <100 HP	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; ² b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary;	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary. ³	
9. Non-emergency, non-black start 2SLB stationary RICE $100 \leq HP \leq 500$	Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O ₂ .	
10. Non-emergency, non-black start 4SLB stationary RICE $100 \leq HP \leq 500$	Limit concentration of CO in the stationary RICE exhaust to 47	

	ppmvd or less at 15 percent O ₂ .	
11. Non-emergency, non-black start 4SRB stationary RICE 100≤HP≤500	Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O ₂ .	
12. Non-emergency, non-black start stationary RICE 100≤HP≤500 which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O ₂ .	

¹If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

²Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2c of this subpart.

³Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[78 FR 6708, Jan. 30, 2013, as amended at 78 FR 14457, Mar. 6, 2013]

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Non-Emergency, non-black start CI stationary RICE ≤300 HP	a. Change oil and filter every 1,000 hours of operation or annually,	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period

	<p>whichever comes first;¹</p> <p>b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;</p> <p>c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.</p>	<p>needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.</p>
2. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O ₂ ; or	
	b. Reduce CO emissions by 70 percent or more.	
3. Non-Emergency, non-black start CI stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O ₂ ; or	
	b. Reduce CO emissions by 70 percent or more.	
4. Emergency stationary CI RICE and black start stationary CI RICE. ²	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ¹	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 500 hours of operation or	

	annually, whichever comes first, and replace as necessary.	
5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year. ²	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ¹ ; b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
6. Non-emergency, non-black start 2SLB stationary RICE	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; ¹	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.	
7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; ¹	
	b. Inspect spark plugs every 1,440 hours of operation or annually,	

	whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
8. Non-emergency, non-black start 4SLB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first; ¹	
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
9. Non-emergency, non-black start 4SLB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install an oxidation catalyst to reduce HAP emissions from the stationary RICE.	
10. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; ¹	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours	

	of operation or annually, whichever comes first, and replace as necessary.	
11. Non-emergency, non-black start 4SRB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first; ¹	
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
12. Non-emergency, non-black start 4SRB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install NSCR to reduce HAP emissions from the stationary RICE.	
13. Non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; ¹ b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

¹Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

²If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[78 FR 6709, Jan. 30, 2013]

Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests

As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

For each . . .	Complying with the requirement to . . .	You must . . .
1. New or reconstructed 2SLB stationary RICE >500 HP located at major sources; new or reconstructed 4SLB stationary RICE ≥250 HP located at major sources; and new or reconstructed CI stationary RICE >500 HP located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually. ¹
2. 4SRB stationary RICE ≥5,000 HP located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually. ¹
3. Stationary RICE >500 HP located at major sources and new or reconstructed 4SLB stationary RICE 250≤HP≤500 located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually. ¹
4. Existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE >500 HP that are limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first.

¹After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6711, Jan. 30, 2013]

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

As stated in §§63.6610, 63.6611, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE:

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB, 4SLB, and CI stationary RICE	a. reduce CO emissions	i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and		(a) For CO and O ₂ measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter <i>and</i> the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
		ii. Measure the O ₂ at the inlet and outlet of the control	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or	(b) Measurements to determine O ₂ must be made at the same time as

		device; and	ASTM Method D6522-00 (Reapproved 2005) ^{abc} (heated probe not necessary)	the measurements for CO concentration.
		iii. Measure the CO at the inlet and the outlet of the control device	(1) ASTM D6522-00 (Reapproved 2005) ^{abc} (heated probe not necessary) or Method 10 of 40 CFR part 60, appendix A-4	(c) The CO concentration must be at 15 percent O ₂ , dry basis.
2. 4SRB stationary RICE	a. reduce formaldehyde emissions	i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and		(a) For formaldehyde, O ₂ , and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter <i>and</i> the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A.
		ii. Measure O ₂ at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method	(a) Measurements to determine O ₂ concentration must be made at the same time as

			D6522-00 (Reapproved 2005) ^a (heated probe not necessary)	the measurements for formaldehyde or THC concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 ^a	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or THC concentration.
		iv. If demonstrating compliance with the formaldehyde percent reduction requirement, measure formaldehyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03 ^a , provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. If demonstrating compliance with the THC percent reduction requirement, measure THC at the inlet and the outlet of the control device	(1) Method 25A, reported as propane, of 40 CFR part 60, appendix A-7	(a) THC concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary RICE; and		(a) For formaldehyde, CO, O ₂ , and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (3-

				point long line'). If the duct is >12 inches in diameter <i>and</i> the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A. If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O ₂ concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005) ^a (heated probe not necessary)	(a) Measurements to determine O ₂ concentration must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iii. Measure moisture content of the station-ary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 ^a	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iv. Measure formalde-hyde at the exhaust of the station-ary RICE; or	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03 ^a , provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the	(a) Formaldehyde concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

			percent R must be greater than or equal to 70 and less than or equal to 130	
		v. measure CO at the exhaust of the station-ary RICE	(1) Method 10 of 40 CFR part 60, appendix A-4, ASTM Method D6522-00 (2005) ^{ac} , Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03 ^a	(a) CO concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

^aYou may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain a copy of ASTM-D6522-00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

^bYou may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[79 FR 11290, Feb. 27, 2014]

Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements

As stated in §§63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. Non-emergency stationary CI	a. Limit the	i. The average CO concentration

RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	concentration of CO, using oxidation catalyst, and using a CPMS	determined from the initial performance test is less than or equal to the CO emission limitation; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and not using oxidation catalyst	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.
4. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, and not using oxidation catalyst	i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
5. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O ₂ or CO ₂ at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and ii. You have conducted a performance evaluation of your

RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP		CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O ₂ or CO ₂ at the outlet of the oxidation catalyst according to the requirements in §63.6625(a); and
		ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average concentration of CO calculated using §63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period.
7. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction, or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the

		requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
8. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
9. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE $250 \leq \text{HP} \leq 500$ located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O ₂ , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
10. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE $250 \leq \text{HP} \leq 500$ located at a major source of HAP,	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation	i. The average formaldehyde concentration, corrected to 15 percent O ₂ , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and

and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	catalyst or NSCR	ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
11. Existing non-emergency stationary RICE $100 \leq \text{HP} \leq 500$ located at a major source of HAP, and existing non-emergency stationary CI RICE $300 < \text{HP} \leq 500$ located at an area source of HAP	a. Reduce CO emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
12. Existing non-emergency stationary RICE $100 \leq \text{HP} \leq 500$ located at a major source of HAP, and existing non-emergency stationary CI RICE $300 < \text{HP} \leq 500$ located at an area source of HAP	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O ₂ , dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.
13. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install an oxidation catalyst	i. You have conducted an initial compliance demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O ₂ ;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F.
14. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	i. You have conducted an initial compliance demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less

		than or equal to 270 ppmvd at 15 percent O ₂ , or the average reduction of emissions of THC is 30 percent or more;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1250 °F.

[78 FR 6712, Jan. 30, 2013]

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements

As stated in §63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved ^a ; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
2. New or reconstructed non-	a. Reduce CO	i. Conducting semiannual

<p>emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP</p>	<p>emissions and not using an oxidation catalyst, and using a CPMS</p>	<p>performance tests for CO to demonstrate that the required CO percent reduction is achieved^a; and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and</p>
		<p>iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</p>
<p>3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, new or reconstructed non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP</p>	<p>a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS</p>	<p>i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction or concentration of CO emissions according to §63.6620; and ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period, or that the emission remain at or below the CO concentration limit; and</p>
		<p>iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.</p>
<p>4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP</p>	<p>a. Reduce formaldehyde emissions and using NSCR</p>	<p>i. Collecting the catalyst inlet temperature data according to §63.6625(b); and</p>
		<p>ii. Reducing these data to 4-hour rolling averages; and</p>
		<p>iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and</p>

		iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. Non-emergency 4SRB stationary RICE with a brake HP ≥5,000 located at a major source of HAP	a. Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved, or to demonstrate that the average reduction of emissions of THC determined from the performance test is equal to or greater than 30 percent. ^a
7. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit ^a ; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month

		and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE $250 \leq \text{HP} \leq 500$ located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit ^a ; and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
9. Existing emergency and black start stationary RICE ≤ 500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤ 300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤ 500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

<p>24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE</p>		
<p>10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE</p>	<p>a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst</p>	<p>i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and</p>
		<p>ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and</p>
		<p>iii. Reducing these data to 4-hour rolling averages; and</p>
		<p>iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and</p>
		<p>v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.</p>
<p>11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE</p>	<p>a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and not using oxidation catalyst</p>	<p>i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and</p>
		<p>ii. Collecting the approved operating parameter (if any) data according to</p>

		§63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
12. Existing limited use CI stationary RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using an oxidation catalyst	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
13. Existing limited use CI stationary RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and not using an oxidation catalyst	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde

		concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
14. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install an oxidation catalyst	<p>i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O₂; and either</p> <p>ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or</p> <p>iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.</p>
15. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	<p>i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O₂, or the average reduction of emissions of THC is 30 percent or more; and either</p> <p>ii. Collecting the catalyst inlet temperature data according to</p>

		§63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F.
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^aAfter you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6715, Jan. 30, 2013]

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in §63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
1. Existing non-emergency, non-black start stationary RICE 100≤HP≤500 located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >300 HP located at an area source of HAP; new or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP; and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at	Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or	i. Semiannually according to the requirements in §63.6650(b)(1)-(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and ii. Annually according to the requirements in §63.6650(b)(6)-(9) for engines that are limited use stationary RICE subject to numerical emission limitations.

a major source of HAP			
		b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or	i. Semiannually according to the requirements in §63.6650(b).
		c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4).	i. Semiannually according to the requirements in §63.6650(b).
2. New or reconstructed non-emergency stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	i. Annually, according to the requirements in §63.6650.
		b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and	i. See item 2.a.i.
		c. Any problems or errors suspected with the meters.	i. See item 2.a.i.
3. Existing non-emergency, non-black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Compliance report	a. The results of the annual compliance demonstration, if conducted during the reporting period.	i. Semiannually according to the requirements in §63.6650(b)(1)-(5).

4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in §63.6640(f)(4)(ii)	Report	a. The information in §63.6650(h)(1)	i. annually according to the requirements in §63.6650(h)(2)-(3).
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[78 FR 6719, Jan. 30, 2013]

Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in §63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in §63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		

§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes	Except that §63.7(b)(1) only applies as specified in §63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that §63.7(b)(2) only applies as specified in §63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that §63.7(c) only applies as specified in §63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at §63.6620.
§63.7(e)(2)	Conduct of performance tests	Yes	Subpart ZZZZ specifies test

	and reduction of data		methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.

§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii), which applies to COMS.
		Except that §63.8(e) only applies as specified in §63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that §63.8(f)(4) only applies as specified in §63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that §63.8(f)(6) only applies as specified in §63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that §63.9(b)(3) is reserved.
		Except that §63.9(b) only applies as specified in §63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that §63.9(c) only applies as specified in §63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that §63.9(d) only applies as specified in §63.6645.
§63.9(e)	Notification of performance test	Yes	Except that §63.9(e) only applies as specified in §63.6645.

§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that §63.9(g) only applies as specified in §63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that §63.9(g) only applies as specified in §63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.
			Except that §63.9(h) only applies as specified in §63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	

§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that §63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that §63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

Appendix A to Subpart ZZZZ of Part 63—Protocol for Using an Electrochemical Analyzer to Determine Oxygen and Carbon Monoxide Concentrations From Certain Engines

1.0 SCOPE AND APPLICATION. WHAT IS THIS PROTOCOL?

This protocol is a procedure for using portable electrochemical (EC) cells for measuring carbon monoxide (CO) and oxygen (O₂) concentrations in controlled and uncontrolled emissions from existing stationary 4-stroke lean burn and 4-stroke rich burn reciprocating internal combustion engines as specified in the applicable rule.

1.1 Analytes. What does this protocol determine?

This protocol measures the engine exhaust gas concentrations of carbon monoxide (CO) and oxygen (O₂).

Analyte	CAS No.	Sensitivity
Carbon monoxide (CO)	630-08-0	Minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.
Oxygen (O ₂)	7782-44-7	

1.2 Applicability. When is this protocol acceptable?

This protocol is applicable to 40 CFR part 63, subpart ZZZZ. Because of inherent cross sensitivities of EC cells, you must not apply this protocol to other emissions sources without specific instruction to that effect.

1.3 Data Quality Objectives. How good must my collected data be?

Refer to Section 13 to verify and document acceptable analyzer performance.

1.4 Range. What is the targeted analytical range for this protocol?

The measurement system and EC cell design(s) conforming to this protocol will determine the analytical range for each gas component. The nominal ranges are defined by choosing up-scale calibration gas concentrations near the maximum anticipated flue gas concentrations for CO and O₂, or no more than twice the permitted CO level.

1.5 Sensitivity. What minimum detectable limit will this protocol yield for a particular gas component?

The minimum detectable limit depends on the nominal range and resolution of the specific EC cell used, and the signal to noise ratio of the measurement system. The minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.

2.0 SUMMARY OF PROTOCOL

In this protocol, a gas sample is extracted from an engine exhaust system and then conveyed to a portable EC analyzer for measurement of CO and O₂ gas concentrations. This method provides measurement system performance specifications and sampling protocols to ensure reliable data. You

may use additions to, or modifications of vendor supplied measurement systems (e.g., heated or unheated sample lines, thermocouples, flow meters, selective gas scrubbers, etc.) to meet the design specifications of this protocol. Do not make changes to the measurement system from the as-verified configuration (Section 3.12).

3.0 DEFINITIONS

3.1 Measurement System. The total equipment required for the measurement of CO and O₂ concentrations. The measurement system consists of the following major subsystems:

3.1.1 Data Recorder. A strip chart recorder, computer or digital recorder for logging measurement data from the analyzer output. You may record measurement data from the digital data display manually or electronically.

3.1.2 Electrochemical (EC) Cell. A device, similar to a fuel cell, used to sense the presence of a specific analyte and generate an electrical current output proportional to the analyte concentration.

3.1.3 Interference Gas Scrubber. A device used to remove or neutralize chemical compounds that may interfere with the selective operation of an EC cell.

3.1.4 Moisture Removal System. Any device used to reduce the concentration of moisture in the sample stream so as to protect the EC cells from the damaging effects of condensation and to minimize errors in measurements caused by the scrubbing of soluble gases.

3.1.5 Sample Interface. The portion of the system used for one or more of the following: sample acquisition; sample transport; sample conditioning or protection of the EC cell from any degrading effects of the engine exhaust effluent; removal of particulate matter and condensed moisture.

3.2 Nominal Range. The range of analyte concentrations over which each EC cell is operated (normally 25 percent to 150 percent of up-scale calibration gas value). Several nominal ranges can be used for any given cell so long as the calibration and repeatability checks for that range remain within specifications.

3.3 Calibration Gas. A vendor certified concentration of a specific analyte in an appropriate balance gas.

3.4 Zero Calibration Error. The analyte concentration output exhibited by the EC cell in response to zero-level calibration gas.

3.5 Up-Scale Calibration Error. The mean of the difference between the analyte concentration exhibited by the EC cell and the certified concentration of the up-scale calibration gas.

3.6 Interference Check. A procedure for quantifying analytical interference from components in the engine exhaust gas other than the targeted analytes.

3.7 Repeatability Check. A protocol for demonstrating that an EC cell operated over a given nominal analyte concentration range provides a stable and consistent response and is not significantly affected by repeated exposure to that gas.

3.8 Sample Flow Rate. The flow rate of the gas sample as it passes through the EC cell. In some situations, EC cells can experience drift with changes in flow rate. The flow rate must be monitored and documented during all phases of a sampling run.

3.9 Sampling Run. A timed three-phase event whereby an EC cell's response rises and plateaus in a sample conditioning phase, remains relatively constant during a measurement data phase, then declines during a refresh phase. The sample conditioning phase exposes the EC cell to the gas sample for a length of time sufficient to reach a constant response. The measurement data phase is the time interval during which gas sample measurements can be made that meet the acceptance criteria of this protocol. The refresh phase then purges the EC cells with CO-free air. The refresh phase replenishes requisite O₂ and moisture in the electrolyte reserve and provides a mechanism to de-gas or desorb any interference gas scrubbers or filters so as to enable a stable CO EC cell response. There are four primary types of sampling runs: pre- sampling calibrations; stack gas sampling; post-sampling calibration checks; and measurement system repeatability checks. Stack gas sampling runs can be chained together for extended evaluations, providing all other procedural specifications are met.

3.10 Sampling Day. A time not to exceed twelve hours from the time of the pre-sampling calibration to the post-sampling calibration check. During this time, stack gas sampling runs can be repeated without repeated recalibrations, providing all other sampling specifications have been met.

3.11 Pre-Sampling Calibration/Post-Sampling Calibration Check. The protocols executed at the beginning and end of each sampling day to bracket measurement readings with controlled performance checks.

3.12 Performance-Established Configuration. The EC cell and sampling system configuration that existed at the time that it initially met the performance requirements of this protocol.

4.0 INTERFERENCES.

When present in sufficient concentrations, NO and NO₂ are two gas species that have been reported to interfere with CO concentration measurements. In the likelihood of this occurrence, it is the protocol user's responsibility to employ and properly maintain an appropriate CO EC cell filter or scrubber for removal of these gases, as described in Section 6.2.12.

5.0 SAFETY. [RESERVED]

6.0 EQUIPMENT AND SUPPLIES.

6.1 What equipment do I need for the measurement system?

The system must maintain the gas sample at conditions that will prevent moisture condensation in the sample transport lines, both before and as the sample gas contacts the EC cells. The essential components of the measurement system are described below.

6.2 Measurement System Components.

6.2.1 Sample Probe. A single extraction-point probe constructed of glass, stainless steel or other non-reactive material, and of length sufficient to reach any designated sampling point. The sample probe must be designed to prevent plugging due to condensation or particulate matter.

6.2.2 Sample Line. Non-reactive tubing to transport the effluent from the sample probe to the EC cell.

6.2.3 Calibration Assembly (optional). A three-way valve assembly or equivalent to introduce calibration gases at ambient pressure at the exit end of the sample probe during calibration checks. The assembly must be designed such that only stack gas or calibration gas flows in the sample line and all gases flow through any gas path filters.

6.2.4 Particulate Filter (optional). Filters before the inlet of the EC cell to prevent accumulation of particulate material in the measurement system and extend the useful life of the components. All filters must be fabricated of materials that are non-reactive to the gas mixtures being sampled.

6.2.5 Sample Pump. A leak-free pump to provide undiluted sample gas to the system at a flow rate sufficient to minimize the response time of the measurement system. If located upstream of the EC cells, the pump must be constructed of a material that is non-reactive to the gas mixtures being sampled.

6.2.8 Sample Flow Rate Monitoring. An adjustable rotameter or equivalent device used to adjust and maintain the sample flow rate through the analyzer as prescribed.

6.2.9 Sample Gas Manifold (optional). A manifold to divert a portion of the sample gas stream to the analyzer and the remainder to a by-pass discharge vent. The sample gas manifold may also include provisions for introducing calibration gases directly to the analyzer. The manifold must be constructed of a material that is non-reactive to the gas mixtures being sampled.

6.2.10 EC cell. A device containing one or more EC cells to determine the CO and O₂ concentrations in the sample gas stream. The EC cell(s) must meet the applicable performance specifications of Section 13 of this protocol.

6.2.11 Data Recorder. A strip chart recorder, computer or digital recorder to make a record of analyzer output data. The data recorder resolution (i.e., readability) must be no greater than 1 ppm for CO; 0.1 percent for O₂; and one degree (either °C or °F) for temperature. Alternatively, you may use a digital or analog meter having the same resolution to observe and manually record the analyzer responses.

6.2.12 Interference Gas Filter or Scrubber. A device to remove interfering compounds upstream of the CO EC cell. Specific interference gas filters or scrubbers used in the performance-established configuration of the analyzer must continue to be used. Such a filter or scrubber must have a means to determine when the removal agent is exhausted. Periodically replace or replenish it in accordance with the manufacturer's recommendations.

7.0 REAGENTS AND STANDARDS. WHAT CALIBRATION GASES ARE NEEDED?

7.1 Calibration Gases. CO calibration gases for the EC cell must be CO in nitrogen or CO in a mixture of nitrogen and O₂. Use CO calibration gases with labeled concentration values certified by the manufacturer to be within ±5 percent of the label value. Dry ambient air (20.9 percent O₂) is acceptable for calibration of the O₂ cell. If needed, any lower percentage O₂ calibration gas must be a mixture of O₂ in nitrogen.

7.1.1 Up-Scale CO Calibration Gas Concentration. Choose one or more up-scale gas concentrations such that the average of the stack gas measurements for each stack gas sampling run are between 25 and 150 percent of those concentrations. Alternatively, choose an up-scale gas that does not exceed twice the concentration of the applicable outlet standard. If a measured gas value exceeds 150 percent of the up-scale CO calibration gas value at any time during the stack gas sampling run, the run must be discarded and repeated.

7.1.2 Up-Scale O₂ Calibration Gas Concentration.

Select an O₂ gas concentration such that the difference between the gas concentration and the average stack gas measurement or reading for each sample run is less than 15 percent O₂. When the average exhaust gas O₂ readings are above 6 percent, you may use dry ambient air (20.9 percent O₂) for the up-scale O₂ calibration gas.

7.1.3 *Zero Gas*. Use an inert gas that contains less than 0.25 percent of the up-scale CO calibration gas concentration. You may use dry air that is free from ambient CO and other combustion gas products (e.g., CO₂).

8.0 SAMPLE COLLECTION AND ANALYSIS

8.1 *Selection of Sampling Sites*.

8.1.1 *Control Device Inlet*. Select a sampling site sufficiently downstream of the engine so that the combustion gases should be well mixed. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

8.1.2 *Exhaust Gas Outlet*. Select a sampling site located at least two stack diameters downstream of any disturbance (e.g., turbocharger exhaust, crossover junction or recirculation take-off) and at least one-half stack diameter upstream of the gas discharge to the atmosphere. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

8.2 *Stack Gas Collection and Analysis*. Prior to the first stack gas sampling run, conduct that the pre-sampling calibration in accordance with Section 10.1. Use Figure 1 to record all data. Zero the analyzer with zero gas. Confirm and record that the scrubber media color is correct and not exhausted. Then position the probe at the sampling point and begin the sampling run at the same flow rate used during the up-scale calibration. Record the start time. Record all EC cell output responses and the flow rate during the "sample conditioning phase" once per minute until constant readings are obtained. Then begin the "measurement data phase" and record readings every 15 seconds for at least two minutes (or eight readings), or as otherwise required to achieve two continuous minutes of data that meet the specification given in Section 13.1. Finally, perform the "refresh phase" by introducing dry air, free from CO and other combustion gases, until several minute-to-minute readings of consistent value have been obtained. For each run use the "measurement data phase" readings to calculate the average stack gas CO and O₂ concentrations.

8.3 *EC Cell Rate*. Maintain the EC cell sample flow rate so that it does not vary by more than ±10 percent throughout the pre-sampling calibration, stack gas sampling and post-sampling calibration check. Alternatively, the EC cell sample flow rate can be maintained within a tolerance range that does not affect the gas concentration readings by more than ±3 percent, as instructed by the EC cell manufacturer.

9.0 QUALITY CONTROL (RESERVED)

10.0 CALIBRATION AND STANDARDIZATION

10.1 *Pre-Sampling Calibration*. Conduct the following protocol once for each nominal range to be used on each EC cell before performing a stack gas sampling run on each field sampling day. Repeat the calibration if you replace an EC cell before completing all of the sampling runs. There is no prescribed order for calibration of the EC cells; however, each cell must complete the measurement data phase during calibration. Assemble the measurement system by following the manufacturer's recommended protocols including for preparing and preconditioning the EC cell. Assure the measurement system has no leaks and verify the gas scrubbing agent is not depleted. Use Figure 1 to record all data.

10.1.1 *Zero Calibration*. For both the O₂ and CO cells, introduce zero gas to the measurement system (e.g., at the calibration assembly) and record the concentration reading every minute until readings are constant for at least two consecutive minutes. Include the time and sample flow rate. Repeat the steps in this section at least once to verify the zero calibration for each component gas.

10.1.2 Zero Calibration Tolerance. For each zero gas introduction, the zero level output must be less than or equal to ± 3 percent of the up-scale gas value or ± 1 ppm, whichever is less restrictive, for the CO channel and less than or equal to ± 0.3 percent O₂ for the O₂ channel.

10.1.3 Up-Scale Calibration. Individually introduce each calibration gas to the measurement system (e.g., at the calibration assembly) and record the start time. Record all EC cell output responses and the flow rate during this “sample conditioning phase” once per minute until readings are constant for at least two minutes. Then begin the “measurement data phase” and record readings every 15 seconds for a total of two minutes, or as otherwise required. Finally, perform the “refresh phase” by introducing dry air, free from CO and other combustion gases, until readings are constant for at least two consecutive minutes. Then repeat the steps in this section at least once to verify the calibration for each component gas. Introduce all gases to flow through the entire sample handling system (i.e., at the exit end of the sampling probe or the calibration assembly).

10.1.4 Up-Scale Calibration Error. The mean of the difference of the “measurement data phase” readings from the reported standard gas value must be less than or equal to ± 5 percent or ± 1 ppm for CO or ± 0.5 percent O₂, whichever is less restrictive, respectively. The maximum allowable deviation from the mean measured value of any single “measurement data phase” reading must be less than or equal to ± 2 percent or ± 1 ppm for CO or ± 0.5 percent O₂, whichever is less restrictive, respectively.

10.2 Post-Sampling Calibration Check. Conduct a stack gas post-sampling calibration check after the stack gas sampling run or set of runs and within 12 hours of the initial calibration. Conduct up-scale and zero calibration checks using the protocol in Section 10.1. Make no changes to the sampling system or EC cell calibration until all post-sampling calibration checks have been recorded. If either the zero or up-scale calibration error exceeds the respective specification in Sections 10.1.2 and 10.1.4 then all measurement data collected since the previous successful calibrations are invalid and re-calibration and re-sampling are required. If the sampling system is disassembled or the EC cell calibration is adjusted, repeat the calibration check before conducting the next analyzer sampling run.

11.0 ANALYTICAL PROCEDURE

The analytical procedure is fully discussed in Section 8.

12.0 CALCULATIONS AND DATA ANALYSIS

Determine the CO and O₂ concentrations for each stack gas sampling run by calculating the mean gas concentrations of the data recorded during the “measurement data phase”.

13.0 PROTOCOL PERFORMANCE

Use the following protocols to verify consistent analyzer performance during each field sampling day.

13.1 Measurement Data Phase Performance Check. Calculate the mean of the readings from the “measurement data phase”. The maximum allowable deviation from the mean for each of the individual readings is ± 2 percent, or ± 1 ppm, whichever is less restrictive. Record the mean value and maximum deviation for each gas monitored. Data must conform to Section 10.1.4. The EC cell flow rate must conform to the specification in Section 8.3.

Example: A measurement data phase is invalid if the maximum deviation of any single reading comprising that mean is greater than ± 2 percent or ± 1 ppm (the default criteria). For example, if the mean = 30 ppm, single readings of below 29 ppm and above 31 ppm are disallowed).

13.2 *Interference Check.* Before the initial use of the EC cell and interference gas scrubber in the field, and semi-annually thereafter, challenge the interference gas scrubber with NO and NO₂ gas standards that are generally recognized as representative of diesel-fueled engine NO and NO₂ emission values. Record the responses displayed by the CO EC cell and other pertinent data on Figure 1 or a similar form.

13.2.1 *Interference Response.* The combined NO and NO₂ interference response should be less than or equal to ±5 percent of the up-scale CO calibration gas concentration.

13.3 *Repeatability Check.* Conduct the following check once for each nominal range that is to be used on the CO EC cell within 5 days prior to each field sampling program. If a field sampling program lasts longer than 5 days, repeat this check every 5 days. Immediately repeat the check if the EC cell is replaced or if the EC cell is exposed to gas concentrations greater than 150 percent of the highest up-scale gas concentration.

13.3.1 *Repeatability Check Procedure.* Perform a complete EC cell sampling run (all three phases) by introducing the CO calibration gas to the measurement system and record the response. Follow Section 10.1.3. Use Figure 1 to record all data. Repeat the run three times for a total of four complete runs. During the four repeatability check runs, do not adjust the system except where necessary to achieve the correct calibration gas flow rate at the analyzer.

13.3.2 *Repeatability Check Calculations.* Determine the highest and lowest average “measurement data phase” CO concentrations from the four repeatability check runs and record the results on Figure 1 or a similar form. The absolute value of the difference between the maximum and minimum average values recorded must not vary more than ±3 percent or ±1 ppm of the up-scale gas value, whichever is less restrictive.

14.0 POLLUTION PREVENTION (RESERVED)

15.0 WASTE MANAGEMENT (RESERVED)

16.0 ALTERNATIVE PROCEDURES (RESERVED)

17.0 REFERENCES

(1) “Development of an Electrochemical Cell Emission Analyzer Test Protocol”, Topical Report, Phil Juneau, Emission Monitoring, Inc., July 1997.

(2) “Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers, and Process Heaters Using Portable Analyzers”, EMC Conditional Test Protocol 30 (CTM-30), Gas Research Institute Protocol GRI-96/0008, Revision 7, October 13, 1997.

(3) “ICAC Test Protocol for Periodic Monitoring”, EMC Conditional Test Protocol 34 (CTM-034), The Institute of Clean Air Companies, September 8, 1999.

(4) “Code of Federal Regulations”, Protection of Environment, 40 CFR, Part 60, Appendix A, Methods 1-4; 10.

TABLE 1: APPENDIX A—SAMPLING RUN DATA.

	Facility_____	Engine I.D._____	Date_____	
Run Type:	()	()	()	()

"											
"											
"											
"											

[78 FR 6721, Jan. 30, 2013]

Appendix F

40 C.F.R. Part 63 Subpart CCCCCC – *NESHAP for Gasoline Dispensing Facilities.*

Subpart CCCCCC—National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

SOURCE: 73 FR 1945, Jan. 10, 2008, unless otherwise noted.

WHAT THIS SUBPART COVERS

§63.11110 What is the purpose of this subpart?

This subpart establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF). This subpart also establishes requirements to demonstrate compliance with the emission limitations and management practices.

§63.11111 Am I subject to the requirements in this subpart?

(a) The affected source to which this subpart applies is each GDF that is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.

(b) If your GDF has a monthly throughput of less than 10,000 gallons of gasoline, you must comply with the requirements in §63.11116.

(c) If your GDF has a monthly throughput of 10,000 gallons of gasoline or more, you must comply with the requirements in §63.11117.

(d) If your GDF has a monthly throughput of 100,000 gallons of gasoline or more, you must comply with the requirements in §63.11118.

(e) An affected source shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. For new or reconstructed affected sources, as specified in §63.11112(b) and (c), recordkeeping to document monthly throughput must begin upon startup of the affected source. For existing sources, as specified in §63.11112(d), recordkeeping to document monthly throughput must begin on January 10, 2008. For existing sources that are subject to this subpart only because they load gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, recordkeeping to document monthly throughput must begin on January 24, 2011. Records required under this paragraph shall be kept for a period of 5 years.

(f) If you are an owner or operator of affected sources, as defined in paragraph (a) of this section, you are not required to obtain a permit under 40 CFR part 70 or 40 CFR part 71 as a result of being subject to this subpart. However, you must still apply for and obtain a permit under 40 CFR part 70 or 40 CFR part 71 if you meet one or more of the applicability criteria found in 40 CFR 70.3(a) and (b) or 40 CFR 71.3(a) and (b).

(g) The loading of aviation gasoline into storage tanks at airports, and the subsequent transfer of aviation gasoline within the airport, is not subject to this subpart.

(h) Monthly throughput is the total volume of gasoline loaded into, or dispensed from, all the gasoline storage tanks located at a single affected GDF. If an area source has two or more GDF at separate locations within the area source, each GDF is treated as a separate affected source.

(i) If your affected source's throughput ever exceeds an applicable throughput threshold, the affected source will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable throughput threshold.

(j) The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to §63.11116 of this subpart.

(k) For any affected source subject to the provisions of this subpart and another Federal rule, you may elect to comply only with the more stringent provisions of the applicable subparts. You must consider all provisions of the rules, including monitoring, recordkeeping, and reporting. You must identify the affected source and provisions with which you will comply in your Notification of Compliance Status required under §63.11124. You also must demonstrate in your Notification of Compliance Status that each provision with which you will comply is at least as stringent as the otherwise applicable requirements in this subpart. You are responsible for making accurate determinations concerning the more stringent provisions, and noncompliance with this rule is not excused if it is later determined that your determination was in error, and, as a result, you are violating this subpart. Compliance with this rule is your responsibility and the Notification of Compliance Status does not alter or affect that responsibility.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4181, Jan. 24, 2011]

§63.11112 What parts of my affected source does this subpart cover?

(a) The emission sources to which this subpart applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDF that meet the criteria specified in §63.11111. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by this subpart.

(b) An affected source is a new affected source if you commenced construction on the affected source after November 9, 2006, and you meet the applicability criteria in §63.11111 at the time you commenced operation.

(c) An affected source is reconstructed if you meet the criteria for reconstruction as defined in §63.2.

(d) An affected source is an existing affected source if it is not new or reconstructed.

§63.11113 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section, except as specified in paragraph (d) of this section.

(1) If you start up your affected source before January 10, 2008, you must comply with the standards in this subpart no later than January 10, 2008.

(2) If you start up your affected source after January 10, 2008, you must comply with the standards in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the standards in this subpart no later than January 10, 2011.

(c) If you have an existing affected source that becomes subject to the control requirements in this subpart because of an increase in the monthly throughput, as specified in §63.11111(c) or §63.11111(d), you must comply with the standards in this subpart no later than 3 years after the affected source becomes subject to the control requirements in this subpart.

(d) If you have a new or reconstructed affected source and you are complying with Table 1 to this subpart, you must comply according to paragraphs (d)(1) and (2) of this section.

(1) If you start up your affected source from November 9, 2006 to September 23, 2008, you must comply no later than September 23, 2008.

(2) If you start up your affected source after September 23, 2008, you must comply upon startup of your affected source.

(e) The initial compliance demonstration test required under §63.11120(a)(1) and (2) must be conducted as specified in paragraphs (e)(1) and (2) of this section.

(1) If you have a new or reconstructed affected source, you must conduct the initial compliance test upon installation of the complete vapor balance system.

(2) If you have an existing affected source, you must conduct the initial compliance test as specified in paragraphs (e)(2)(i) or (e)(2)(ii) of this section.

(i) For vapor balance systems installed on or before December 15, 2009, you must test no later than 180 days after the applicable compliance date specified in paragraphs (b) or (c) of this section.

(ii) For vapor balance systems installed after December 15, 2009, you must test upon installation of the complete vapor balance system.

(f) If your GDF is subject to the control requirements in this subpart only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must comply with the standards in this subpart as specified in paragraphs (f)(1) or (f)(2) of this section.

(1) If your GDF is an existing facility, you must comply by January 24, 2014.

(2) If your GDF is a new or reconstructed facility, you must comply by the dates specified in paragraphs (f)(2)(i) and (ii) of this section.

(i) If you start up your GDF after December 15, 2009, but before January 24, 2011, you must comply no later than January 24, 2011.

(ii) If you start up your GDF after January 24, 2011, you must comply upon startup of your GDF.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4181, Jan. 24, 2011]

EMISSION LIMITATIONS AND MANAGEMENT PRACTICES

§63.11115 What are my general duties to minimize emissions?

Each owner or operator of an affected source under this subpart must comply with the requirements of paragraphs (a) and (b) of this section.

(a) You must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(b) You must keep applicable records and submit reports as specified in §63.11125(d) and §63.11126(b).

[76 FR 4182, Jan. 24, 2011]

§63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.

(a) You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

(1) Minimize gasoline spills;

(2) Clean up spills as expeditiously as practicable;

(3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

(4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

(b) You are not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

(c) You must comply with the requirements of this subpart by the applicable dates specified in §63.11113.

(d) Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

§63.11117 Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more.

(a) You must comply with the requirements in section §63.11116(a).

(b) Except as specified in paragraph (c) of this section, you must only load gasoline into storage tanks at your facility by utilizing submerged filling, as defined in §63.11132, and as specified in paragraphs (b)(1), (b)(2), or (b)(3) of this section. The applicable distances in paragraphs (b)(1) and (2)

shall be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank.

(1) Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the tank.

(2) Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the tank.

(3) Submerged fill pipes not meeting the specifications of paragraphs (b)(1) or (b)(2) of this section are allowed if the owner or operator can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by the Administrator's delegated representative during the course of a site visit.

(c) Gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements in paragraph (b) of this section, but must comply only with all of the requirements in §63.11116.

(d) You must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

(e) You must submit the applicable notifications as required under §63.11124(a).

(f) You must comply with the requirements of this subpart by the applicable dates contained in §63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

§63.11118 Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more.

(a) You must comply with the requirements in §§63.11116(a) and 63.11117(b).

(b) Except as provided in paragraph (c) of this section, you must meet the requirements in either paragraph (b)(1) or paragraph (b)(2) of this section.

(1) Each management practice in Table 1 to this subpart that applies to your GDF.

(2) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(2)(i) and (ii) of this section, you will be deemed in compliance with this subsection.

(i) You operate a vapor balance system at your GDF that meets the requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

(ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.

(c) The emission sources listed in paragraphs (c)(1) through (3) of this section are not required to comply with the control requirements in paragraph (b) of this section, but must comply with the requirements in §63.11117.

(1) Gasoline storage tanks with a capacity of less than 250 gallons that are constructed after January 10, 2008.

(2) Gasoline storage tanks with a capacity of less than 2,000 gallons that were constructed before January 10, 2008.

(3) Gasoline storage tanks equipped with floating roofs, or the equivalent.

(d) Cargo tanks unloading at GDF must comply with the management practices in Table 2 to this subpart.

(e) You must comply with the applicable testing requirements contained in §63.11120.

(f) You must submit the applicable notifications as required under §63.11124.

(g) You must keep records and submit reports as specified in §§63.11125 and 63.11126.

(h) You must comply with the requirements of this subpart by the applicable dates contained in §63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008]

TESTING AND MONITORING REQUIREMENTS

§63.11120 What testing and monitoring requirements must I meet?

(a) Each owner or operator, at the time of installation, as specified in §63.11113(e), of a vapor balance system required under §63.11118(b)(1), and every 3 years thereafter, must comply with the requirements in paragraphs (a)(1) and (2) of this section.

(1) You must demonstrate compliance with the leak rate and cracking pressure requirements, specified in item 1(g) of Table 1 to this subpart, for pressure-vacuum vent valves installed on your gasoline storage tanks using the test methods identified in paragraph (a)(1)(i) or paragraph (a)(1)(ii) of this section.

(i) California Air Resources Board Vapor Recovery Test Procedure TP-201.1E,—Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003 (incorporated by reference, see §63.14).

(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f).

(2) You must demonstrate compliance with the static pressure performance requirement specified in item 1(h) of Table 1 to this subpart for your vapor balance system by conducting a static pressure test on your gasoline storage tanks using the test methods identified in paragraphs (a)(2)(i), (a)(2)(ii), or (a)(2)(iii) of this section.

(i) California Air Resources Board Vapor Recovery Test Procedure TP-201.3,—Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended March 17, 1999 (incorporated by reference, see §63.14).

(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f).

(iii) Bay Area Air Quality Management District Source Test Procedure ST-30—Static Pressure Integrity Test—Underground Storage Tanks, adopted November 30, 1983, and amended December 21, 1994 (incorporated by reference, see §63.14).

(b) Each owner or operator choosing, under the provisions of §63.6(g), to use a vapor balance system other than that described in Table 1 to this subpart must demonstrate to the Administrator or delegated authority under paragraph §63.11131(a) of this subpart, the equivalency of their vapor balance system to that described in Table 1 to this subpart using the procedures specified in paragraphs (b)(1) through (3) of this section.

(1) You must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction using the California Air Resources Board Vapor Recovery Test Procedure TP-201.1,—Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003, (incorporated by reference, see §63.14).

(2) You must, during the initial performance test required under paragraph (b)(1) of this section, determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in item 1(g) of Table 1 to this subpart and for the static pressure performance requirement in item 1(h) of Table 1 to this subpart.

(3) You must comply with the testing requirements specified in paragraph (a) of this section.

(c) Conduct of performance tests. Performance tests conducted for this subpart shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (*i.e.*, performance based on normal operating conditions) of the affected source. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(d) Owners and operators of gasoline cargo tanks subject to the provisions of Table 2 to this subpart must conduct annual certification testing according to the vapor tightness testing requirements found in §63.11092(f).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

NOTIFICATIONS, RECORDS, AND REPORTS

§63.11124 What notifications must I submit and when?

(a) Each owner or operator subject to the control requirements in §63.11117 must comply with paragraphs (a)(1) through (3) of this section.

(1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in §63.11117, unless you meet the requirements in paragraph (a)(3) of this section. If your affected source is subject to the control requirements in §63.11117 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in

§63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (a)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in §63.13.

(i) The name and address of the owner and the operator.

(ii) The address (i.e., physical location) of the GDF.

(iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of §63.11117 that apply to you.

(2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in §63.13, within 60 days of the applicable compliance date specified in §63.11113, unless you meet the requirements in paragraph (a)(3) of this section. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facilities' monthly throughput is calculated based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (a)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (a)(1) of this section.

(3) If, prior to January 10, 2008, you are operating in compliance with an enforceable State, local, or tribal rule or permit that requires submerged fill as specified in §63.11117(b), you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (a)(1) or paragraph (a)(2) of this section.

(b) Each owner or operator subject to the control requirements in §63.11118 must comply with paragraphs (b)(1) through (5) of this section.

(1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in §63.11118. If your affected source is subject to the control requirements in §63.11118 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (b)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in §63.13.

(i) The name and address of the owner and the operator.

(ii) The address (i.e., physical location) of the GDF.

(iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of §63.11118 that apply to you.

(2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in §63.13, in accordance with the schedule specified in §63.9(h). The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facility's throughput is determined based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under

paragraph (b)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (b)(1) of this section.

(3) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(3)(i) and (ii) of this section, you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (b)(1) or paragraph (b)(2) of this subsection.

(i) You operate a vapor balance system at your gasoline dispensing facility that meets the requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

(ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.

(4) You must submit a Notification of Performance Test, as specified in §63.9(e), prior to initiating testing required by §63.11120(a) and (b).

(5) You must submit additional notifications specified in §63.9, as applicable.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

§63.11125 What are my recordkeeping requirements?

(a) Each owner or operator subject to the management practices in §63.11118 must keep records of all tests performed under §63.11120(a) and (b).

(b) Records required under paragraph (a) of this section shall be kept for a period of 5 years and shall be made available for inspection by the Administrator's delegated representatives during the course of a site visit.

(c) Each owner or operator of a gasoline cargo tank subject to the management practices in Table 2 to this subpart must keep records documenting vapor tightness testing for a period of 5 years. Documentation must include each of the items specified in §63.11094(b)(2)(i) through (viii). Records of vapor tightness testing must be retained as specified in either paragraph (c)(1) or paragraph (c)(2) of this section.

(1) The owner or operator must keep all vapor tightness testing records with the cargo tank.

(2) As an alternative to keeping all records with the cargo tank, the owner or operator may comply with the requirements of paragraphs (c)(2)(i) and (ii) of this section.

(i) The owner or operator may keep records of only the most recent vapor tightness test with the cargo tank, and keep records for the previous 4 years at their office or another central location.

(ii) Vapor tightness testing records that are kept at a location other than with the cargo tank must be instantly available (*e.g.*, via e-mail or facsimile) to the Administrator's delegated representative during the course of a site visit or within a mutually agreeable time frame. Such records must be an exact duplicate image of the original paper copy record with certifying signatures.

(d) Each owner or operator of an affected source under this subpart shall keep records as specified in paragraphs (d)(1) and (2) of this section.

(1) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.

(2) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

§63.11126 What are my reporting requirements?

(a) Each owner or operator subject to the management practices in §63.11118 shall report to the Administrator the results of all volumetric efficiency tests required under §63.11120(b). Reports submitted under this paragraph must be submitted within 180 days of the completion of the performance testing.

(b) Each owner or operator of an affected source under this subpart shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.11115(a), including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.

[76 FR 4183, Jan. 24, 2011]

OTHER REQUIREMENTS AND INFORMATION

§63.11130 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions apply to you.

§63.11131 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority such as the applicable State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are as specified in paragraphs (c)(1) through (3) of this section.

(1) Approval of alternatives to the requirements in §§63.11116 through 63.11118 and 63.11120.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

(3) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

§63.11132 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act (CAA), or in subparts A and BBBBBB of this part. For purposes of this subpart, definitions in this section supersede definitions in other parts or subparts.

Dual-point vapor balance system means a type of vapor balance system in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection.

Gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines.

Gasoline cargo tank means a delivery tank truck or railcar which is loading or unloading gasoline, or which has loaded or unloaded gasoline on the immediately previous load.

Gasoline dispensing facility (GDF) means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine used solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline-fueled engines and equipment.

Monthly throughput means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12.

Motor vehicle means any self-propelled vehicle designed for transporting persons or property on a street or highway.

Nonroad engine means an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 7411 of this title or section 7521 of this title.

Nonroad vehicle means a vehicle that is powered by a nonroad engine, and that is not a motor vehicle or a vehicle used solely for competition.

Submerged filling means, for the purposes of this subpart, the filling of a gasoline storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in §63.11117(b) from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.

Vapor balance system means a combination of pipes and hoses that create a closed system between the vapor spaces of an unloading gasoline cargo tank and a receiving storage tank such that vapors displaced from the storage tank are transferred to the gasoline cargo tank being unloaded.

Vapor-tight means equipment that allows no loss of vapors. Compliance with vapor-tight requirements can be determined by checking to ensure that the concentration at a potential leak source is

not equal to or greater than 100 percent of the Lower Explosive Limit when measured with a combustible gas detector, calibrated with propane, at a distance of 1 inch from the source.

Vapor-tight gasoline cargo tank means a gasoline cargo tank which has demonstrated within the 12 preceding months that it meets the annual certification test requirements in §63.11092(f) of this part.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

Table 1 to Subpart CCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More¹

If you own or operate	Then you must
1. A new, reconstructed, or existing GDF subject to §63.11118	Install and operate a vapor balance system on your gasoline storage tanks that meets the design criteria in paragraphs (a) through (h).
	(a) All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect.
	(b) The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight, as defined in §63.11132.
	(c) The vapor balance system shall be designed such that the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer.
	(d) The vapor recovery and product adaptors, and the method of connection with the delivery elbow, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.
	(e) If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in §63.11117(b).
	(f) Liquid fill connections for all systems shall be equipped with vapor-tight caps.
	(g) Pressure/vacuum (PV) vent valves shall be installed on the storage tank vent pipes. The pressure specifications for PV vent valves shall be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water.
	(h) The vapor balance system shall be capable of meeting the static pressure performance requirement of the following

	equation:
	$Pf = 2e^{-500.887/v}$
	Where:
	Pf = Minimum allowable final pressure, inches of water.
	v = Total ullage affected by the test, gallons.
	e = Dimensionless constant equal to approximately 2.718.
	2 = The initial pressure, inches water.
2. A new or reconstructed GDF, or any storage tank(s) constructed after November 9, 2006, at an existing affected facility subject to §63.11118	Equip your gasoline storage tanks with a dual-point vapor balance system, as defined in §63.11132, and comply with the requirements of item 1 in this Table.

¹The management practices specified in this Table are not applicable if you are complying with the requirements in §63.11118(b)(2), except that if you are complying with the requirements in §63.11118(b)(2)(i)(B), you must operate using management practices at least as stringent as those listed in this Table.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4184, Jan. 24, 2011]

Table 2 to Subpart CCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Cargo Tanks Unloading at Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More

If you own or operate	Then you must
A gasoline cargo tank	Not unload gasoline into a storage tank at a GDF subject to the control requirements in this subpart unless the following conditions are met:
	(i) All hoses in the vapor balance system are properly connected,
	(ii) The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect,
	(iii) All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight,
	(iv) All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank, and
	(v) All hatches on the tank truck are closed and securely fastened.
	(vi) The filling of storage tanks at GDF shall be limited to unloading from vapor-tight gasoline cargo tanks. Documentation that the cargo tank has met the specifications of EPA Method 27 shall be carried with the cargo tank, as specified in §63.11125(c).

Table 3 to Subpart CCCCC of Part 63—Applicability of General Provisions

Citation	Subject	Brief description	Applies to subpart CCCCC
§63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications	Yes, specific requirements given in §63.11111.
§63.1(c)(2)	Title V Permit	Requirements for obtaining a title V permit from the applicable permitting authority	Yes, §63.11111(f) of subpart CCCCC exempts identified area sources from the obligation to obtain title V operating permits.
§63.2	Definitions	Definitions for part 63 standards	Yes, additional definitions in §63.11132.
§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§63.4	Prohibited Activities and Circumvention	Prohibited activities; Circumvention, severability	Yes.
§63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes, except that these notifications are not required for facilities subject to §63.11116
§63.6(a)	Compliance with Standards/Operation & Maintenance—Applicability	General Provisions apply unless compliance extension; General Provisions apply to area sources that become major	Yes.
§63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for CAA section 112(f)	Yes.
§63.6(b)(5)	Notification	Must notify if commenced	Yes.

		construction or reconstruction after proposal	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	No.
§63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Comply according to date in this subpart, which must be no later than 3 years after effective date; for CAA section 112(f) standards, comply within 90 days of effective date unless compliance extension	No, §63.11113 specifies the compliance dates.
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources That become major must comply with major source standards by date indicated in this subpart or by equivalent time period (e.g., 3 years)	No.
§63.6(d)	[Reserved]		
63.6(e)(1)(i)	General duty to minimize emissions	Operate to minimize emissions at all times; information Administrator will use to determine if operation and maintenance requirements were met.	No. <i>See</i> §63.11115 for general duty requirement.
63.6(e)(1)(ii)	Requirement to correct malfunctions ASAP	Owner or operator must correct malfunctions as soon as possible.	No.
§63.6(e)(2)	[Reserved]		
§63.6(e)(3)	Startup, Shutdown, and Malfunction (SSM) Plan	Requirement for SSM plan; content of SSM plan;	No.

		actions during SSM	
§63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	No.
§63.6(f)(2)-(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§63.6(g)(1)-(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
§63.6(h)(1)	Compliance with Opacity/Visible Emission (VE) Standards	You must comply with opacity/VE standards at all times except during SSM	No.
§63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	If standard does not State test method, use EPA Method 9 for opacity in appendix A of part 60 of this chapter and EPA Method 22 for VE in appendix A of part 60 of this chapter	No.
§63.6(h)(2)(ii)	[Reserved]		
§63.6(h)(2)(iii)	Using Previous Tests To Demonstrate Compliance With Opacity/VE Standards	Criteria for when previous opacity/VE testing can be used to show compliance with this subpart	No.
§63.6(h)(3)	[Reserved]		
§63.6(h)(4)	Notification of Opacity/VE Observation Date	Must notify Administrator of anticipated date of observation	No.
§63.6(h)(5)(i), (iii)-(v)	Conducting Opacity/VE Observations	Dates and schedule for conducting opacity/VE observations	No.
§63.6(h)(5)(ii)	Opacity Test Duration and Averaging Times	Must have at least 3 hours of observation with 30 6-minute averages	No.
§63.6(h)(6)	Records of Conditions During Opacity/VE Observations	Must keep records available and allow Administrator to inspect	No.

§63.6(h)(7)(i)	Report Continuous Opacity Monitoring System (COMS) Monitoring Data From Performance Test	Must submit COMS data with other performance test data	No.
§63.6(h)(7)(ii)	Using COMS Instead of EPA Method 9	Can submit COMS data instead of EPA Method 9 results even if rule requires EPA Method 9 in appendix A of part 60 of this chapter, but must notify Administrator before performance test	No.
§63.6(h)(7)(iii)	Averaging Time for COMS During Performance Test	To determine compliance, must reduce COMS data to 6-minute averages	No.
§63.6(h)(7)(iv)	COMS Requirements	Owner/operator must demonstrate that COMS performance evaluations are conducted according to §63.8(e); COMS are properly maintained and operated according to §63.8(c) and data quality as §63.8(d)	No.
§63.6(h)(7)(v)	Determining Compliance with Opacity/VE Standards	COMS is probable but not conclusive evidence of compliance with opacity standard, even if EPA Method 9 observation shows otherwise. Requirements for COMS to be probable evidence- proper maintenance, meeting Performance Specification 1 in appendix B of part 60 of this chapter, and data have not been altered	No.
§63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Administrator will use all COMS, EPA Method 9 (in appendix A of part 60 of this chapter), and EPA Method 22 (in appendix A	No.

		of part 60 of this chapter) results, as well as information about operation and maintenance to determine compliance	
§63.6(h)(9)	Adjusted Opacity Standard	Procedures for Administrator to adjust an opacity standard	No.
§63.6(i)(1)-(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
§63.6(j)	Presidential Compliance Exemption	President may exempt any source from requirement to comply with this subpart	Yes.
§63.7(a)(2)	Performance Test Dates	Dates for conducting initial performance testing; must conduct 180 days after compliance date	Yes.
§63.7(a)(3)	CAA Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes.
§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.
§63.7(b)(2)	Notification of Re-scheduling	If have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay	Yes.
§63.7(c)	Quality Assurance (QA)/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.

§63.7(e)(1)	Conditions for Conducting Performance Tests	Performance test must be conducted under representative conditions	No, §63.11120(c) specifies conditions for conducting performance tests.
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative	Yes.
§63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used	Yes.
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method	Yes.
§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years	Yes.
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring of Flares	Monitoring requirements for flares in §63.11 apply	Yes.

§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	No.
§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	No.
§63.8(c)(1)(i)-(iii)	Operation and Maintenance of Continuous Monitoring Systems (CMS)	Must maintain and operate each CMS as specified in §63.6(e)(1); must keep parts for routine repairs readily available; must develop a written SSM plan for CMS, as specified in §63.6(e)(3)	No.
§63.8(c)(2)-(8)	CMS Requirements	Must install to get representative emission or parameter measurements; must verify operational status before or at performance test	No.
§63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old	No.

		versions for 5 years after revisions	
§63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	No.
§63.8(f)(1)-(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	No.
§63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for continuous emissions monitoring system (CEMS)	No.
§63.8(g)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4 equally spaced data points; data that cannot be used in average	No.
§63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§63.9(b)(1)-(2), (4)-(5)	Initial Notifications	Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each	Yes.
§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate	Yes.
§63.9(d)	Notification of Special Compliance Requirements for New Sources	For sources that commence construction between proposal and promulgation and want to comply 3 years	Yes.

		after effective date	
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.
§63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No.
§63.9(g)	Additional Notifications when Using CMS	Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative	Yes, however, there are no opacity standards.
§63.9(h)(1)-(6)	Notification of Compliance Status	Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority	Yes, however, there are no opacity standards.
§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change when notifications must be submitted	Yes.
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.
§63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source	Yes.
§63.10(b)(1)	Recordkeeping/Reporting	General requirements; keep all records readily available; keep for 5 years	Yes.
§63.10(b)(2)(i)	Records related to SSM	Recordkeeping of occurrence and duration of startups and shutdowns	No.
§63.10(b)(2)(ii)	Records related to SSM	Recordkeeping of malfunctions	No. <i>See</i> §63.11125(d) for recordkeeping of (1) occurrence and

			duration and (2) actions taken during malfunction.
§63.10(b)(2)(iii)	Maintenance records	Recordkeeping of maintenance on air pollution control and monitoring equipment	Yes.
§63.10(b)(2)(iv)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
§63.10(b)(2)(v)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
§63.10(b)(2)(vi)-(xi)	CMS Records	Malfunctions, inoperative, out-of-control periods	No.
§63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
§63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	Yes.
§63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes.
§63.10(b)(3)	Records	Applicability determinations	Yes.
§63.10(c)	Records	Additional records for CMS	No.
§63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
§63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	No.
§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.
§63.10(d)(5)	SSM Reports	Contents and submission	No. <i>See</i> §63.11126(b) for malfunction reporting requirements.

§63.10(e)(1)-(2)	Additional CMS Reports	Must report results for each CEMS on a unit; written copy of CMS performance evaluation; two-three copies of COMS performance evaluation	No.
§63.10(e)(3)(i)-(iii)	Reports	Schedule for reporting excess emissions	No.
§63.10(e)(3)(iv)-(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c)(7)-(8) and 63.10(c)(5)-(13)	No.
§63.10(e)(3)(iv)-(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents	No, §63.11130(K) specifies excess emission events for this subpart.

		in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c)(7)-(8) and 63.10(c)(5)-(13)	
§63.10(e)(3)(vi)-(viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for CMS; requires all of the information in §§63.10(c)(5)-(13) and 63.8(c)(7)-(8)	No.
§63.10(e)(4)	Reporting COMS Data	Must submit COMS data with performance test data	No.
§63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.
§63.11(b)	Flares	Requirements for flares	No.
§63.12	Delegation	State authority to enforce standards	Yes.
§63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes.
§63.14	Incorporations by Reference	Test methods incorporated by reference	Yes.
§63.15	Availability of Information	Public and confidential information	Yes.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

Appendix G
40 C.F.R. Part 75, *Continuous Emission Monitoring*

[Title 45](#) → [Subtitle A](#) → [Subchapter A](#) → Part 75

Title 45: Public Welfare

PART 75—UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS FOR HHS AWARDS

AUTHORITY: 5 U.S.C. 301.

SOURCE: 79 FR 75889, Dec. 19, 2014, unless otherwise noted.

Subpart A—Acronyms and Definitions

§75.1 Acronyms.

The following acronyms apply to this part:

CAS Cost Accounting Standards

CFDA Catalog of Federal Domestic Assistance

CFR Code of Federal Regulations

CMIA Cash Management Improvement Act

COG Councils Of Governments

COSO Committee of Sponsoring Organizations of the Treadway Commission

EPA Environmental Protection Agency

ERISA Employee Retirement Income Security Act of 1974 (29 U.S.C. 1301-1461)

EUI Energy Usage Index

F&A Facilities and Administration

FAC Federal Audit Clearinghouse

FAIN Federal Award Identification Number

FAPIS Federal Awardee Performance and Integrity Information System

FAR Federal Acquisition Regulation

FFATA Federal Funding Accountability and Transparency Act of 2006 or Transparency Act—Public Law 109-282, as amended by §6202(a) of Public Law 110-252 (31 U.S.C. 6101)

FICA Federal Insurance Contributions Act

FOIA Freedom of Information Act

FR Federal Register

FTE Full-time equivalent

GAAP Generally Accepted Accounting Principles

GAGAS Generally Accepted Government Auditing Standards
GAO Government Accountability Office
GOCO Government owned, contractor operated
GSA General Services Administration
HHS U.S. Department of Health and Human Services
IBS Institutional Base Salary
IHE Institutions of Higher Education
IRC Internal Revenue Code
ISDEAA Indian Self-Determination and Education and Assistance Act
MTC Modified Total Cost
MTDC Modified Total Direct Cost
OMB Office of Management and Budget
PII Personally Identifiable Information
PMS Payment Management System
PRHP Post-retirement Health Plans
PTE Pass-through Entity
REUI Relative Energy Usage Index
SAM System for Award Management (accessible at <https://www.sam.gov>)
SF 424 Standard Form 424 series and Form Families Application for Federal Assistance
SFA Student Financial Aid
SNAP Supplemental Nutrition Assistance Program
SPOC Single Point of Contact
TANF Temporary Assistance for Needy Families
TFM Treasury Financial Manual
U.S.C. United States Code
VAT Value Added Tax
[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3012, Jan. 20, 2016]

§75.2 Definitions.

These are the definitions for terms used in this part. Different definitions may be found in Federal statutes or regulations that apply more specifically to particular program or activities. These definitions could be supplemented by additional instructional information provided in in governmentwide standard information collections.

Acquisition cost means the cost of the asset including the cost to ready the asset for its intended use. Acquisition cost for equipment, for example, means the net invoice price of the equipment, including the cost of any modifications, attachments, accessories, or auxiliary apparatus necessary to make it usable for the purpose for which it is acquired. Acquisition costs for software includes those development costs capitalized in accordance with generally accepted accounting principles (GAAP). Ancillary charges, such as taxes, duty, protective in transit insurance, freight, and installation may be included in or excluded from the acquisition cost in accordance with the non-Federal entity's regular accounting practices.

Advance payment means a payment that a Federal awarding agency or pass-through entity makes by any appropriate payment mechanism, including a predetermined payment schedule, before the non-Federal entity disburses the funds for program purposes.

Allocation means the process of assigning a cost, or a group of costs, to one or more cost objective(s), in reasonable proportion to the benefit provided or other equitable relationship. The process may entail assigning a cost(s) directly to a final cost objective or through one or more intermediate cost objectives.

Audit finding means deficiencies which the auditor is required by §75.516(a) to report in the schedule of findings and questioned costs.

Auditee means any non-Federal entity that expends Federal awards which must be audited under subpart F-of this part.

Auditor means an auditor who is a public accountant, or a Federal, state, local government, or Indian Tribe audit organization, which meets the general standards specified for external auditors in generally accepted government auditing standards (GAGAS). The term auditor does not include internal auditors of nonprofit organizations.

Awardee (see Non-Federal entity).

Budget means the financial plan for the project or program that the Federal awarding agency or pass-through entity approves during the Federal award process or in subsequent amendments to the Federal award. It may include the Federal and non-Federal share or only the Federal share, as determined by the Federal awarding agency or pass-through entity.

Capital assets means tangible or intangible assets used in operations having a useful life of more than one year which are capitalized in accordance with GAAP. Capital assets include:

(1) Land, buildings (facilities), equipment, and intellectual property (including software) whether acquired by purchase, construction, manufacture, lease-purchase, exchange, or through capital leases; and

(2) Additions, improvements, modifications, replacements, rearrangements, reinstallations, renovations or alterations to capital assets that materially increase their value or useful life (not ordinary repairs and maintenance).

Capital expenditures means expenditures to acquire capital assets or expenditures to make additions, improvements, modifications, replacements, rearrangements, reinstallations, renovations, or alterations to capital assets that materially increase their value or useful life.

Catalog of Federal Domestic Assistance (CFDA) number means the number assigned to a Federal program in the CFDA.

CFDA program title means the title of the program under which the Federal award was funded in the CFDA.

Central service cost allocation plan means the documentation identifying, accumulating, and allocating or developing billing rates based on the allowable costs of services provided by a state, local government, or Indian tribe on a centralized basis to its departments and agencies. The costs of these services may be allocated or billed to users.

Claim means, depending on the context, either:

(1) A written demand or written assertion by one of the parties to a Federal award seeking as a matter of right:

(i) The payment of money in a sum certain;

(ii) The adjustment or interpretation of the terms and conditions of the Federal award; or

(iii) Other relief arising under or relating to a Federal award.

(2) A request for payment that is not in dispute when submitted.

Class of Federal awards means a group of Federal awards either awarded under a specific program or group of programs or to a specific type of non-Federal entity or group of non-Federal entities to which specific provisions or exceptions may apply.

Closeout means the process by which the Federal awarding agency or pass-through entity determines that all applicable administrative actions and all required work of the Federal award have been completed and takes actions as described in §75.381.

Cluster of programs means a grouping of closely related programs that share common compliance requirements. The types of clusters of programs are research and development (R&D), student financial aid (SFA), and other clusters. "Other clusters" are as defined by OMB in the compliance supplement or as designated by a state for Federal awards the state provides to its subrecipients that meet the definition of a cluster of programs. When designating an "other cluster," a state must identify the Federal awards included in the cluster and advise the subrecipients of compliance requirements applicable to the cluster, consistent with §75.352(a). A cluster of programs must be considered as one program for determining major programs, as described in §75.518, and, with the exception of R&D as described in §75.501(c), whether a program-specific audit may be elected.

Cognizant agency for audit means the Federal agency designated to carry out the responsibilities described in §75.513(a). The cognizant agency for audit is not necessarily the same as the cognizant agency for indirect costs. A list of cognizant agencies for audit may be found at the FAC Web site.

Cognizant agency for indirect costs means the Federal agency responsible for reviewing, negotiating, and approving cost allocation plans or indirect cost proposals developed under this part on behalf of all Federal agencies. The cognizant agency for indirect cost is not necessarily the same as the cognizant agency for audit. For assignments of cognizant agencies see the following:

(1) For IHEs: Appendix III to part 75 C.11.

(2) For nonprofit organizations: Appendix IV to part 75 C.2.a.

(3) For state and local governments: Appendix V to part 75 F.1.

(4) For Indian tribes: Appendix VII to part 75 D.1.

Commercial organization means an organization, institution, corporation, or other legal entity, including, but not limited to, partnerships, sole proprietorships, and limited liability companies, that is organized or operated for the profit or benefit of its shareholders or other owners. The term includes small and large businesses and is used interchangeably with “for-profit organization.”

Compliance supplement means appendix XI to part 75 (previously known as the Circular A-133 Compliance Supplement).

Computing devices means machines used to acquire, store, analyze, process, and publish data and other information electronically, including accessories (or “peripherals”) for printing, transmitting and receiving, or storing electronic information. See also *Supplies* and *Information technology systems*.

Contract means a legal instrument by which a non-Federal entity purchases property or services needed to carry out the project or program under a Federal award. The term as used in this part does not include a legal instrument, even if the non-Federal entity considers it a contract, when the substance of the transaction meets the definition of a Federal award or subaward (see *Subaward*).

Contractor means an entity that receives a contract as defined in *Contract*.

Cooperative agreement means a legal instrument of financial assistance between a Federal awarding agency or pass-through entity and a non-Federal entity that, consistent with 31 U.S.C. 6302-6305:

(1) Is used to enter into a relationship the principal purpose of which is to transfer anything of value from the Federal awarding agency or pass-through entity to the non-Federal entity to carry out a public purpose authorized by a law of the United States (see 31 U.S.C. 6101(3)); and not to acquire property or services for the Federal Government or pass-through entity's direct benefit or use;

(2) Is distinguished from a grant in that it provides for substantial involvement between the Federal awarding agency or pass-through entity and the non-Federal entity in carrying out the activity contemplated by the Federal award.

(3) The term does not include:

(i) A cooperative research and development agreement as defined in 15 U.S.C. 3710a; or

(ii) An agreement that provides only:

(A) Direct United States Government cash assistance to an individual;

(B) A subsidy;

(C) A loan;

(D) A loan guarantee; or

(E) Insurance

Cooperative audit resolution means the use of audit follow-up techniques which promote prompt corrective action by improving communication, fostering collaboration, promoting trust, and developing an understanding between the Federal agency and the non-Federal entity. This approach is based upon:

- (1) A strong commitment by Federal agency and non-Federal entity leadership to program integrity;
- (2) Federal agencies strengthening partnerships and working cooperatively with non-Federal entities and their auditors; and non-Federal entities and their auditors working cooperatively with Federal agencies;
- (3) A focus on current conditions and corrective action going forward;
- (4) Federal agencies offering appropriate relief for past noncompliance when audits show prompt corrective action has occurred; and
- (5) Federal agency leadership sending a clear message that continued failure to correct conditions identified by audits which are likely to cause improper payments, fraud, waste, or abuse is unacceptable and will result in sanctions.

Corrective action means action taken by the auditee that:

- (1) Corrects identified deficiencies;
- (2) Produces recommended improvements; or
- (3) Demonstrates that audit findings are either invalid or do not warrant auditee action.

Cost allocation plan means central service cost allocation plan or public assistance cost allocation plan.

Cost objective means a program, function, activity, award, organizational subdivision, contract, or work unit for which cost data are desired and for which provision is made to accumulate and measure the cost of processes, products, jobs, capital projects, etc. A cost objective may be a major function of the non-Federal entity, a particular service or project, a Federal award, or an indirect (Facilities & Administrative (F&A)) cost activity, as described in subpart E of this part. See also *Final cost objective* and *Intermediate cost objective*.

Cost sharing or matching means the portion of project costs not paid by Federal funds (unless otherwise authorized by Federal statute). This may include the value of allowable third party in-kind contributions, as well as expenditures by the recipient. See also §75.306.

Cross-cutting audit finding means an audit finding where the same underlying condition or issue affects Federal awards of more than one Federal awarding agency or pass-through entity.

Departmental Appeals Board means the independent office established in the Office of the Secretary with delegated authority from the Secretary to review and decide certain disputes between recipients of HHS funds and HHS awarding agencies under 45 CFR part 16 and to perform other review, adjudication and mediation services as assigned.

Disallowed costs means those charges to a Federal award that the Federal awarding agency or pass-through entity determines to be unallowable, in accordance with the applicable Federal statutes, regulations, or the terms and conditions of the Federal award.

Equipment means tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost which equals or exceeds the lesser of the capitalization level established by the non-Federal entity for financial statement purposes, or \$5,000. See also *Capital assets, Computing devices, General purpose equipment, Information technology systems, Special purpose equipment, and Supplies.*

Excess property means property acquired in whole or in part under the control of any Federal awarding agency that, as determined by the head of the awarding agency or his/her delegate, is no longer required for the agency's needs or the discharge of its responsibilities.

Expenditure report means:

(1) For non-construction awards, the SF-425 Federal Financial Report (FFR) (or other OMB-approved equivalent report);

(2) For construction awards, the SF-271 "Outlay Report and Request for Reimbursement" (or other OMB-approved equivalent report).

Expenditures means charges made by a non-Federal entity to a project or program for which a Federal award was received.

(1) The charges may be reported on a cash or accrual basis, as long as the methodology is disclosed and is consistently applied.

(2) For reports prepared on a cash basis, expenditures are the sum of:

(i) Cash disbursements for direct charges for property and services;

(ii) The amount of indirect expense charged;

(iii) The value of third-party in-kind contributions applied; and

(iv) The amount of cash advance payments and payments made to subrecipients.

(3) For reports prepared on an accrual basis, expenditures are the sum of:

(i) Cash disbursements for direct charges for property and services;

(ii) The amount of indirect expense incurred;

(iii) The value of third-party in-kind contributions applied; and

(iv) The net increase or decrease in the amounts owed by the non-Federal entity for:

(A) Goods and other property received;

(B) Services performed by employees, contractors, subrecipients, and other payees;

(C) Programs for which no current services or performance are required such as annuities, insurance claims, or other benefit payments.

Federal agency means an “agency” as defined at 5 U.S.C. 551(1) and further clarified by 5 U.S.C. 552(f).

Federal Audit Clearinghouse (FAC) means the clearinghouse designated by OMB as the repository of record where non-Federal entities are required to transmit the reporting packages required by subpart F of this part. The mailing address of the FAC is Federal Audit Clearinghouse, Bureau of the Census, 1201 E. 10th Street, Jeffersonville, IN 47132 and the web address is: <http://harvester.census.gov/sac/>. Any future updates to the location of the FAC may be found at the OMB Web site.

Federal award has the meaning, depending on the context, in either paragraph (1) or (2) of this definition:

(1)(i) The Federal financial assistance that a non-Federal entity receives directly from a Federal awarding agency or indirectly from a pass-through entity, as described in §75.101; or

(ii) The cost-reimbursement contract under the Federal Acquisition Regulations that a non-Federal entity receives directly from a Federal awarding agency or indirectly from a pass-through entity, as described in §75.101.

(2) The instrument setting forth the terms and conditions. The instrument is the grant agreement, cooperative agreement, other agreement for assistance covered in paragraph (2) of *Federal financial assistance*, or the cost-reimbursement contract awarded under the Federal Acquisition Regulations.

(3) Federal award does not include other contracts that a Federal agency uses to buy goods or services from a contractor or a contract to operate Federal Government owned, contractor operated facilities (GOCOs).

(4) See also definitions of *Federal financial assistance*, *grant agreement*, and *cooperative agreement*.

Federal award date means the date when the Federal award is signed by the authorized official of the Federal awarding agency.

Federal awarding agency means the Federal agency that provides a Federal award directly to a non-Federal entity.

Federal financial assistance means:

(1) Assistance that non-Federal entities receive or administer in the form of:

(i) Grants;

(ii) Cooperative agreements;

(iii) Non-cash contributions or donations of property (including donated surplus property);

(iv) Direct appropriations;

(v) Food commodities; and

(vi) Other financial assistance (except assistance listed in paragraph (b) of this section).

(2) For §75.202 and subpart F of this part, *Federal financial assistance* also includes assistance that non-Federal entities receive or administer in the form of:

- (i) Loans;
- (ii) Loan Guarantees;
- (iii) Interest subsidies; and
- (iv) Insurance.

(3) *Federal financial assistance* does not include amounts received as reimbursement for services rendered to individuals as described in §75.502(h) and (i).

Federal interest means, for purposes of §75.343 or when used in connection with the acquisition or improvement of real property, equipment, or supplies under a Federal award, the dollar amount that is the product of the:

- (1) Federal share of total project costs; and
- (2) Current fair market value of the property, improvements, or both, to the extent the costs of acquiring or improving the property were included as project costs.

Federal program means:

- (1) All Federal awards which are assigned a single number in the CFDA.
- (2) When no CFDA number is assigned, all Federal awards to non-Federal entities from the same agency made for the same purpose must be combined and considered one program.
- (3) Notwithstanding paragraphs (1) and (2) of this definition, a cluster of programs. The types of clusters of programs are:

- (i) Research and development (R&D);
- (ii) Student financial aid (SFA); and
- (iii) "Other clusters," as described in the definition of Cluster of Programs

Federal share means the portion of total project costs that are paid by Federal funds.

Final cost objective means a cost objective which has allocated to it both direct and indirect costs and, in the non-Federal entity's accumulation system, is one of the final accumulation points, such as a particular award, internal project, or other direct activity of a non-Federal entity. See also *Cost objective* and *Intermediate cost objective*.

Fixed amount awards means a type of grant agreement under which the Federal awarding agency or pass-through entity provides a specific level of support without regard to actual costs incurred under the Federal award. This type of Federal award reduces some of the administrative burden and record-keeping requirements for both the non-Federal entity and Federal awarding agency or pass-through entity. Accountability is based primarily on performance and results. See §§75.201(b) and 75.353.

Foreign organization means an entity that is:

(1) A public or private organization located in a country other than the United States and its territories that is subject to the laws of the country in which it is located, irrespective of the citizenship of project staff or place of performance;

(2) A private nongovernmental organization located in a country other than the United States that solicits and receives cash contributions from the general public;

(3) A charitable organization located in a country other than the United States that is nonprofit and tax exempt under the laws of its country of domicile and operation, and is not a university, college, accredited degree-granting institution of education, private foundation, hospital, organization engaged exclusively in research or scientific activities, church, synagogue, mosque or other similar entities organized primarily for religious purposes; or

(4) An organization located in a country other than the United States not recognized as a *Foreign Public Entity*.

Foreign public entity means:

(1) A foreign government or foreign governmental entity;

(2) A public international organization, which is an organization entitled to enjoy privileges, exemptions, and immunities as an international organization under the International Organizations Immunities Act (22 U.S.C. 288-288f);

(3) An entity owned (in whole or in part) or controlled by a foreign government; or

(4) Any other entity consisting wholly or partially of one or more foreign governments or foreign governmental entities.

General purpose equipment means equipment which is not limited to research, medical, scientific or other technical activities. Examples include office equipment and furnishings, modular offices, telephone networks, information technology equipment and systems, air conditioning equipment, reproduction and printing equipment, and motor vehicles. See also *Equipment* and *Special Purpose Equipment*.

Generally Accepted Accounting Principles (GAAP) has the meaning specified in accounting standards issued by the Government Accounting Standards Board (GASB) and the Financial Accounting Standards Board (FASB).

Generally Accepted Government Auditing Standards (GAGAS), also known as the Yellow Book, means generally accepted government auditing standards issued by the Comptroller General of the United States, which are applicable to financial audits.

Grant agreement means a legal instrument of financial assistance between a Federal awarding agency or pass-through entity and a non-Federal entity that, consistent with 31 U.S.C. 6302, 6304:

(1) Is used to enter into a relationship the principal purpose of which is to transfer anything of value from the Federal awarding agency or pass-through entity to the non-Federal entity to carry out a public purpose authorized by a law of the United States (see 31 U.S.C. 6101(3)); and not to acquire property or services for the Federal awarding agency or pass-through entity's direct benefit or use;

(2) Is distinguished from a cooperative agreement in that it does not provide for substantial involvement between the Federal awarding agency or pass-through entity and the non-Federal entity in carrying out the activity contemplated by the Federal award.

(3) Does not include an agreement that provides only:

(i) Direct United States Government cash assistance to an individual;

(ii) A subsidy;

(iii) A loan;

(iv) A loan guarantee; or

(v) Insurance.

Grantee (see Recipient)

HHS awarding agency means any organization component of HHS that is authorized to make and administer awards.

Hospital means a facility licensed as a hospital under the law of any state or a facility operated as a hospital by the United States, a state, or a subdivision of a state.

Improper payment:

(1) Means any payment that should not have been made or that was made in an incorrect amount (including overpayments and underpayments) under statutory, contractual, administrative, or other legally applicable requirements; and

(2) Includes any payment to an ineligible party, any payment for an ineligible good or service, any duplicate payment, any payment for a good or service not received (except for such payments where authorized by law), any payment that does not account for credit for applicable discounts, and any payment where insufficient or lack of documentation prevents a reviewer from discerning whether a payment was proper.

Indian tribe means any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. Chapter 33), which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians (25 U.S.C. 450b(e)). See annually published Bureau of Indian Affairs list of Indian Entities Recognized and Eligible to Receive Services.

Indirect cost rate proposal means the documentation prepared by a non-Federal entity to substantiate its request for the establishment of an indirect cost rate as described in appendix III through appendix VII, and appendix IX of this part.

Indirect (Facilities and Administration or F&A) costs means costs incurred for a common or joint purpose benefitting more than one cost objective, and not readily assignable to the cost objectives specifically benefitted, without effort disproportionate to the results achieved. To facilitate equitable distribution of indirect expenses to the cost objectives served, it may be necessary to establish a number of pools of indirect (F&A) costs. Indirect (F&A) cost pools must be distributed to benefitted cost objectives on bases that will produce an equitable result in consideration of relative benefits derived.

Information technology systems means computing devices, ancillary equipment, software, firmware, and similar procedures, services (including support services), and related resources. See also *Computing devices* and *Equipment*.

Institution of Higher Education (IHE) is defined at 20 U.S.C. 1001.

Intangible property means property having no physical existence, such as trademarks, copyrights, patents and patent applications and property, such as loans, notes and other debt instruments, lease agreements, stock and other instruments of property ownership (whether the property is tangible or intangible).

Intermediate cost objective means a cost objective that is used to accumulate indirect costs or service center costs that are subsequently allocated to one or more indirect cost pools or final cost objectives. See also *Cost objective* and *Final cost objective*.

Internal control over compliance requirements for Federal awards means a process implemented by a non-Federal entity designed to provide reasonable assurance regarding the achievement of the following objectives for Federal awards:

(1) Transactions are properly recorded and accounted for, in order to:

(i) Permit the preparation of reliable financial statements and Federal reports;

(ii) Maintain accountability over assets; and

(iii) Demonstrate compliance with Federal statutes, regulations, and the terms and conditions of the Federal award;

(2) Transactions are executed in compliance with:

(i) Federal statutes, regulations, and the terms and conditions of the Federal award that could have a direct and material effect on a Federal program; and

(ii) Any other Federal statutes and regulations that are identified in the Compliance Supplement; and

(3) Funds, property, and other assets are safeguarded against loss from unauthorized use or disposition.

Internal controls means a process, implemented by a non-Federal entity, designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

(1) Effectiveness and efficiency of operations;

(2) Reliability of reporting for internal and external use; and

(3) Compliance with applicable laws and regulations.

Loan means a Federal loan or loan guarantee received or administered by a non-Federal entity, except as used in the definition of *Program income*.

(1) The term "direct loan" means a disbursement of funds by the Federal Government to a non-Federal borrower under a contract that requires the repayment of such funds with or without interest. The

term includes the purchase of, or participation in, a loan made by another lender and financing arrangements that defer payment for more than 90 days, including the sale of a Federal Government asset on credit terms. The term does not include the acquisition of a federally guaranteed loan in satisfaction of default claims or the price support loans of the Commodity Credit Corporation.

(2) The term “direct loan obligation” means a binding agreement by a Federal awarding agency to make a direct loan when specified conditions are fulfilled by the borrower.

(3) The term “loan guarantee” means any Federal Government guarantee, insurance, or other pledge with respect to the payment of all or a part of the principal or interest on any debt obligation of a non-Federal borrower to a non-Federal lender, but does not include the insurance of deposits, shares, or other withdrawable accounts in financial institutions.

(4) The term “loan guarantee commitment” means a binding agreement by a Federal awarding agency to make a loan guarantee when specified conditions are fulfilled by the borrower, the lender, or any other party to the guarantee agreement.

Local government means any unit of government within a state, including a:

- (1) County;
- (2) Borough;
- (3) Municipality;
- (4) City;
- (5) Town;
- (6) Township;
- (7) Parish;
- (8) Local public authority, including any public housing agency under the United States Housing Act of 1937;
- (9) Special district;
- (10) School district;
- (11) Intrastate district;
- (12) Council of governments, whether or not incorporated as a nonprofit corporation under state law;
and
- (13) Any other agency or instrumentality of a multi-, regional, or intra-state or local government.

Major program means a Federal program determined by the auditor to be a major program in accordance with §75.518 or a program identified as a major program by a Federal awarding agency or pass-through entity in accordance with §75.503(e).

Management decision means the evaluation by the Federal awarding agency or pass-through entity of the audit findings and corrective action plan and the issuance of a written decision to the auditee as to what corrective action is necessary.

Micro-purchase means a purchase of supplies or services using simplified acquisition procedures, the aggregate amount of which does not exceed the micro-purchase threshold. Micro-purchase procedures comprise a subset of a non-Federal entity's small purchase procedures. The non-Federal entity uses such procedures in order to expedite the completion of its lowest-dollar small purchase transactions and minimize the associated administrative burden and cost. The micro-purchase threshold is set by the Federal Acquisition Regulation at 48 CFR Subpart 2.1 (Definitions). It is \$3,000 except as otherwise discussed in subpart 2.1 of that regulation, but this threshold is periodically adjusted for inflation.

Modified Total Direct Cost (MTDC) means all direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel, and up to the first \$25,000 of each subaward (regardless of the period of performance of the subawards under the award). MTDC excludes equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs and the portion of each subaward in excess of \$25,000. Other items may only be excluded when necessary to avoid a serious inequity in the distribution of indirect costs, and with the approval of the cognizant agency for indirect costs.

Non-Federal entity means a state, local government, Indian tribe, institution of higher education (IHE), or nonprofit organization that carries out a Federal award as a recipient or subrecipient.

Nonprofit organization means any corporation, trust, association, cooperative, or other organization, not including IHEs, that:

(1) Is operated primarily for scientific, educational, service, charitable, or similar purposes in the public interest;

(2) Is not organized primarily for profit; and

(3) Uses net proceeds to maintain, improve, or expand the operations of the organization.

Obligations, when used in connection with a non-Federal entity's utilization of funds under a Federal award, *obligations* means orders placed for property and services, contracts and subawards made, and similar transactions during a given period that require payment by the non-Federal entity during the same or a future period.

Office of Management and Budget (OMB) means the Executive Office of the President, Office of Management and Budget.

Oversight agency for audit means the Federal awarding agency that provides the predominant amount of funding directly to a non-Federal entity not assigned a cognizant agency for audit. When there is no direct funding, the Federal awarding agency which is the predominant source of pass-through funding must assume the oversight responsibilities. The duties of the oversight agency for audit and the process for any reassignments are described in §75.513(b).

Participant support costs means direct costs for items such as stipends or subsistence allowances, travel allowances, and registration fees paid to or on behalf of participants or trainees (but not employees) in connection with conferences, or training projects.

Pass-through entity means a non-Federal entity that provides a subaward to a subrecipient to carry out part of a Federal program.

Performance goal means a target level of performance expressed as a tangible, measurable objective, against which actual achievement can be compared, including a goal expressed as a quantitative standard, value, or rate. In some instances (e.g., discretionary research awards), this may be limited to the requirement to submit technical performance reports (to be evaluated in accordance with agency policy).

Period of performance means the time during which the non-Federal entity may incur new obligations to carry out the work authorized under the Federal award. The Federal awarding agency or pass-through entity must include start and end dates of the period of performance in the Federal award (see §§75.210(a)(5) and 75.352(a)(1)(v)).

Personal property means property of any kind except real property. It may be tangible, having physical existence, or intangible, such as copyrights, patents, or securities.

Personally Identifiable Information (PII) means information that can be used to distinguish or trace an individual's identity, either alone or when combined with other personal or identifying information that is linked or linkable to a specific individual. Some information that is considered to be PII is available in public sources such as telephone books, public Web sites, and university listings. This type of information is considered to be Public PII and includes, for example, first and last name, address, work telephone number, email address, home telephone number, and general educational credentials. The definition of PII is not anchored to any single category of information or technology. Rather, it requires a case-by-case assessment of the specific risk that an individual can be identified. Non-PII can become PII whenever additional information is made publicly available, in any medium and from any source, that, when combined with other available information, could be used to identify an individual.

Principal Investigator/Program Director (PI/PD) means the individual (s) designated by the recipient to direct the project or program being supported by the grant. The PI/PD is responsible and accountable to officials of the recipient organization for the proper conduct of the project, program, or activity.

Prior approval means written approval by an authorized HHS official evidencing prior consent before a recipient undertakes certain activities or incurs specific costs.

Program income means gross income earned by the non-Federal entity that is directly generated by a supported activity or earned as a result of the Federal award during the period of performance except as provided in §75.307(f). (See *Period of performance*.) Program income includes but is not limited to income from fees for services performed, the use or rental of real or personal property acquired under Federal awards, the sale of commodities or items fabricated under a Federal award, license fees and royalties on patents and copyrights, and principal and interest on loans made with Federal award funds. Interest earned on advances of Federal funds is not program income. Except as otherwise provided in Federal statutes, regulations, or the terms and conditions of the Federal award, program income does not include rebates, credits, discounts, and interest earned on any of them. See also §§75.307, 75.407 and 35 U.S.C. 200-212 (applies to inventions made under Federal awards).

Project costs means total allowable costs incurred under a Federal award and all required cost sharing and voluntary committed cost sharing, including third-party contributions.

Project period (see *Period of performance*).

Property means real property or personal property.

Protected Personally Identifiable Information (Protected PII) *Protected PII* means an individual's first name or first initial and last name in combination with any one or more of types of information, including, but not limited to, social security number, passport number, credit card numbers, clearances, bank numbers, biometrics, date and place of birth, mother's maiden name, criminal, medical and financial records, educational transcripts. This does not include PII that is required by law to be disclosed. (See also Personally Identifiable Information (PII)).

Questioned cost means a cost that is questioned by the auditor because of an audit finding:

(1) Which resulted from a violation or possible violation of a statute, regulation, or the terms and conditions of a Federal award, including for funds used to match Federal funds;

(2) Where the costs, at the time of the audit, are not supported by adequate documentation; or

(3) Where the costs incurred appear unreasonable and do not reflect the actions a prudent person would take in the circumstances.

Real property means land, including land improvements, structures and appurtenances thereto, but excludes moveable machinery and equipment.

Recipient means an entity, usually but not limited to non-Federal entities, that receives a Federal award directly from a Federal awarding agency to carry out an activity under a Federal program. The term recipient does not include subrecipients. See also *Non-Federal entity*.

Research is defined as a systematic study directed toward fuller scientific knowledge or understanding of the subject studied. "Development" is the systematic use of knowledge and understanding gained from research directed toward the production of useful materials, devices, systems, or methods, including design and development of prototypes and processes.

Research and Development (R&D) means all research activities, both basic and applied, and all development activities that are performed by HHS award recipients. The term research also includes activities involving the training of individuals in research techniques where such activities utilize the same facilities as other research and development activities and where such activities are not included in the instruction function.

Simplified acquisition threshold means the dollar amount below which a non-Federal entity may purchase property or services using small purchase methods. Non-Federal entities adopt small purchase procedures in order to expedite the purchase of items costing less than the simplified acquisition threshold. The simplified acquisition threshold is set by the Federal Acquisition Regulation at 48 CFR subpart 2.1 and in accordance with 41 U.S.C. 1908. As of the publication of this part, the simplified acquisition threshold is \$150,000, but this threshold is periodically adjusted for inflation. See also Micro-purchase.

Special purpose equipment means equipment which is used only for research, medical, scientific, or other technical activities. Examples of special purpose equipment include microscopes, x-ray machines, surgical instruments, and spectrometers. See also *Equipment* and *General purpose equipment*.

State means any state of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any agency or instrumentality thereof exclusive of local governments.

Student Financial Aid (SFA) means Federal awards under those programs of general student assistance, such as those authorized by Title IV of the Higher Education Act of 1965, as amended, (20

U.S.C. 1070-1099d), which are administered by the U.S. Department of Education, and similar programs provided by other Federal agencies. It does not include Federal awards under programs that provide fellowships or similar Federal awards to students on a competitive basis, or for specified studies or research.

Subaward means an award provided by a pass-through entity to a subrecipient for the subrecipient to carry out part of a Federal award received by the pass-through entity. It does not include payments to a contractor or payments to an individual that is a beneficiary of a Federal program. A subaward may be provided through any form of legal agreement, including an agreement that the pass-through entity considers a contract.

Subrecipient means a non-Federal entity that receives a subaward from a pass-through entity to carry out part of a Federal program; but does not include an individual that is a beneficiary of such program. A subrecipient may also be a recipient of other Federal awards directly from a Federal awarding agency.

Supplies means all tangible personal property other than those described in *Equipment*. A computing device is a supply if the acquisition cost is less than the lesser of the capitalization level established by the non-Federal entity for financial statement purposes or \$5,000, regardless of the length of its useful life. See also *Computing devices* and *Equipment*.

Surplus property (see *Excess property*)

Suspension of award activities means an action by the HHS awarding agency requiring the recipient to cease all activities on the award pending corrective action by the recipient. It is a separate action from suspension under HHS regulations (2 CFR part 376) implementing Executive Orders 12549 and 12689.

Termination means the ending of a Federal award, in whole or in part at any time prior to the planned end of period of performance.

Third-party in-kind contributions means the value of non-cash contributions (*i.e.*, property or services) that:

(1) Benefit a federally assisted project or program; and

(2) Are contributed by non-Federal third parties, without charge, to a non-Federal entity under a Federal award.

Total Costs (see §75.402).

Unliquidated obligations means, for financial reports prepared on a cash basis, obligations incurred by the non-Federal entity that have not been paid (liquidated). For reports prepared on an accrual expenditure basis, these are obligations incurred by the non-Federal entity for which an expenditure has not been recorded.

Unobligated balance means the amount of funds authorized under a Federal award that the non-Federal entity has not obligated. The amount is computed by subtracting the cumulative amount of the non-Federal entity's unliquidated obligations and expenditures of funds under the Federal award from the cumulative amount of the funds that the Federal awarding agency or pass-through entity authorized the non-Federal entity to obligate.

Voluntary committed cost sharing means cost sharing specifically pledged on a voluntary basis in the proposal's budget or the Federal award on the part of the non-Federal entity and that becomes a binding requirement of Federal award.

Working capital advance means a procedure whereby funds are advanced to the recipient to cover its estimated disbursement needs for a given initial period.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3012, Jan. 20, 2016; 81 FR 19044, Apr. 4, 2016]

Subpart B—General Provisions

§75.100 Purpose.

(a)(1) This part establishes uniform administrative requirements, cost principles, and audit requirements for Federal awards to non-Federal entities, as described in §75.101. HHS awarding agencies must not impose additional or inconsistent requirements, except as provided in §§75.102 and 75.210, or unless specifically required by Federal statute, regulation, or Executive Order.

(2) This part provides the basis for a systematic and periodic collection and uniform submission by Federal agencies of information on all Federal financial assistance programs to the Office of Management and Budget (OMB). It also establishes Federal policies related to the delivery of this information to the public, including through the use of electronic media. It prescribes the manner in which General Services Administration (GSA), OMB, and Federal agencies that administer Federal financial assistance programs are to carry out their statutory responsibilities under the Federal Program Information Act (31 U.S.C. 6101-6106).

(b) *Administrative requirements.* Subparts B through D of this part set forth the uniform administrative requirements for grant and cooperative agreements, including the requirements for HHS awarding agency management of Federal grant programs before the Federal award has been made, and the requirements HHS awarding agencies may impose on non-Federal entities in the Federal award.

(c) *Cost principles.* Subpart E of this part establishes principles for determining the allowable costs incurred by non-Federal entities under Federal awards. The principles are for the purpose of cost determination and are not intended to identify the circumstances or dictate the extent of Federal Government participation in the financing of a particular program or project. The principles are designed to provide that Federal awards bear their fair share of cost recognized under these principles except where restricted or prohibited by statute.

(d) *Single audit requirements and audit follow-up.* Subpart F of this part is issued pursuant to the Single Audit Act Amendments of 1996, (31 U.S.C. 7501-7507). It sets forth standards for obtaining consistency and uniformity among Federal agencies for the audit of non-Federal entities expending Federal awards. These provisions also provide the policies and procedures for HHS awarding agencies and pass-through entities when using the results of these audits.

(e) For OMB guidance to Federal awarding agencies on Challenges and Prizes, please see M-10-11 Guidance on the Use of Challenges and Prizes to Promote Open Government, issued March 8, 2010, or its successor.

§75.101 Applicability.

(a) *General applicability to Federal agencies.* The requirements established in this part apply to Federal agencies that make Federal awards to non-Federal entities. These requirements are applicable to all costs related to Federal awards.

(b)(1) *Applicability to different types of Federal awards.* The following table describes what portions of this part apply to which types of Federal awards. The terms and conditions of Federal-awards (including this part) flow down to subawards to subrecipients unless a particular section of this part or the terms and conditions of the Federal award specifically indicate otherwise. This means that non-Federal entities must comply with requirements in this part regardless of whether the non-Federal entity is a recipient or subrecipient of a Federal award. Pass-through entities must comply with the requirements described in subpart D of this part, §§75.351 through 75.353, but not any requirements in this part directed towards Federal awarding agencies unless the requirements of this part or the terms and conditions of the Federal award indicate otherwise. This table must be read along with the other provisions in this section

The following portions of the part:	Are applicable to the following types of Federal awards and fixed-price contracts and subcontracts (except as noted in paragraphs (d) and (e) below):	Are NOT applicable to the following types of Federal awards and fixed-price contracts and subcontracts:
This table must be read along with the other provisions in this section		
Subpart A— Acronyms and Definitions	—All	
Subpart B—General Provisions, except for §§75.111, 75.112. and 75.113	—All	
Sections 75.111, 75.112, and 75.113	—Grant agreements and cooperative agreements	—Agreements for loans, loan guarantees, interest subsidies and insurance. —Procurement contracts awarded by Federal Agencies under the Federal Acquisition Regulations and subcontracts under these contracts.
Subparts C-D, except for §§75.202, 75.303, 75.351-.353	—Grant agreements and cooperative agreements	—Agreements for loans, loan guarantees, interest subsidies and insurance. —Procurement contracts awarded under the Federal Acquisition Regulations and cost-reimbursement and subcontracts under these contracts.
§75.202	—Grant Agreements and cooperative agreements —Agreements for loans, loan guarantees, interest subsidies and	—Procurement contracts awarded under the Federal Acquisition Regulations and cost-reimbursement and subcontracts

	insurance	under these contracts.
§§75.303, 75.351-.353	—All	
Subpart E—Cost Principles	—Grant agreements and cooperative agreements, except those providing food commodities —All procurement contracts under the Federal Acquisition Regulations except those that are not negotiated	—Grant agreements and cooperative agreements providing food commodities. —Fixed amount awards. —Agreements for loans, loan guarantees, interest subsidies and insurance. —Federal awards to hospitals (See Appendix IX).
Subpart F—Audit Requirements	—Grant agreements and cooperative agreements —Contracts and subcontracts, except for fixed price contract and subcontracts, awarded under the Federal Acquisition Regulation —Agreements for loans, loan guarantees, interest subsidies and insurance and other forms of Federal Financial Assistance as defined by the Single Audit Act Amendment of 1996	—Fixed-price contracts and subcontracts awarded under the Federal Acquisition Regulation.

(2) *Federal award of cost-reimbursement contract under the FAR to a non-Federal entity.* When a non-Federal entity is awarded a cost-reimbursement contract, only subpart D of this part §§75.351 through 75.353 (in addition to any FAR related requirements for subaward monitoring), subpart E of this part and subpart F of this part are incorporated by reference into the contract. However, when the Cost Accounting Standards (CAS) are applicable to the contract, they take precedence over the requirements of this part except for subpart F of this part when they are in conflict. In addition, costs that are made unallowable under 10 U.S.C. 2324(e) and 41 U.S.C. 4304(a) as described in the FAR subpart 31.2 and subpart 31.603 are always unallowable. For requirements other than those covered in subpart D of this part, §§75.351 through 75.353, subpart E of this part and subpart F of this part, the terms of the contract and the FAR apply.

(3) With the exception of subpart F of this part, which is required by the Single Audit Act, in any circumstances where the provisions of Federal statutes or regulations differ from the provisions of this part, the provision of the Federal statutes or regulations govern. This includes, for agreements with Indian tribes, the provisions of the Indian Self-Determination and Education and Assistance Act (ISDEAA), as amended, 25 U.S.C. 450-458ddd-2.

(c) HHS awarding agencies may apply subparts A through E of this part to Federal agencies (see §75.217), for-profit entities, foreign public entities, or foreign organizations, except where the HHS awarding agency determines that the application of these subparts would be inconsistent with the international obligations of the United States or the statutes or regulations of a foreign government.

(d) Except for §75.202 and §§75.351 through 75.353 of subpart D of this part, the requirements in subpart C of this part, subpart D of this part, and subpart E of this part do not apply to the following programs:

(1) The block grant awards authorized by the Omnibus Budget Reconciliation Act of 1981 (including Community Services), except to the extent that subpart E of this part apply to subrecipients of Community Services Block Grant funds pursuant to 42 U.S.C. 9916(a)(1)(B);

(2) Federal awards to local education agencies under 20 U.S.C. 7702-7703b, (portions of the Impact Aid program);

(3) Payments under the Department of Veterans Affairs' State Home Per Diem Program (38 U.S.C. 1741); and

(4) Federal awards authorized under the Child Care and Development Block Grant Act of 1990, as amended:

(i) Child Care and Development Block Grant (42 U.S.C. 9858)

(ii) Child Care Mandatory and Matching Funds of the Child Care and Development Fund (42 U.S.C. 9858)

(e) Except for §75.202, the guidance in subpart C of this part does not apply to the following programs:

(1) Entitlement Federal awards to carry out the following programs of the Social Security Act:

(i) Temporary Assistance for Needy Families (title IV-A of the Social Security Act, 42 U.S.C. 601-619);

(ii) Child Support Enforcement and Establishment of Paternity (title IV-D of the Social Security Act, 42 U.S.C. 651-669b);

(iii) Foster Care and Adoption Assistance (title IV-E of the Act, 42 U.S.C. 670-679c);

(iv) Aid to the Aged, Blind, and Disabled (titles I, X, XIV, and XVI-AABD of the Act, as amended);

(v) Medical Assistance (Medicaid) (title XIX of the Act, 42 U.S.C. 1396-1396w-5) not including the State Medicaid Fraud Control program authorized by §1903(a)(6)(B) of the Social Security Act (42 U.S.C. 1396b(a)(6)(B)); and

(vi) Children's Health Insurance Program (title XXI of the Act, 42 U.S.C. 1397aa-1397mm).

(2) A Federal award for an experimental, pilot, or demonstration project that is also supported by a Federal award listed in paragraph (e)(1) of this section;

(3) Federal awards under subsection 412(e) of the Immigration and Nationality Act and subsection 501(a) of the Refugee Education Assistance Act of 1980 (Pub. L. 96-422, 94 Stat. 1809), for cash assistance, medical assistance, and supplemental security income benefits to refugees and entrants and the administrative costs of providing the assistance and benefits (8 U.S.C. 1522(e));

(4) Entitlement awards under the following programs of The National School Lunch Act:

(i) National School Lunch Program (section 4 of the Act, 42 U.S.C. 1753),

(ii) Commodity Assistance (section 6 of the Act, 42 U.S.C. 1755),

(iii) Special Meal Assistance (section 11 of the Act, 42 U.S.C. 1759a),

(iv) Summer Food Service Program for Children (section 13 of the Act, 42 U.S.C. 1761), and

(v) Child and Adult Care Food Program (section 17 of the Act, 42 U.S.C. 1766).

(5) Entitlement awards under the following programs of The Child Nutrition Act of 1966:

(i) Special Milk Program (section 3 of the Act, 42 U.S.C. 1772),

(ii) School Breakfast Program (section 4 of the Act, 42 U.S.C. 1773), and

(iii) State Administrative Expenses (section 7 of the Act, 42 U.S.C. 1776).

(6) Entitlement awards for State Administrative Expenses under The Food and Nutrition Act of 2008 (section 16 of the Act, 7 U.S.C. 2025).

(7) Non-discretionary Federal awards under the following non-entitlement programs:

(i) Special Supplemental Nutrition Program for Women, Infants and Children (section 17 of the Child Nutrition Act of 1966) 42 U.S.C. 1786;

(ii) The Emergency Food Assistance Programs (Emergency Food Assistance Act of 1983) 7 U.S.C. 7501 note; and

(iii) Commodity Supplemental Food Program (section 5 of the Agriculture and Consumer Protection Act of 1973) 7 U.S.C. 612c note.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3013, Jan. 20, 2016]

§75.102 Exceptions.

(a) With the exception of subpart F of this part, OMB may allow exceptions for classes of Federal awards or non-Federal entities subject to the requirements of this part when exceptions are not prohibited by statute. However, in the interest of maximum uniformity, exceptions from the requirements of this part will be permitted only in unusual circumstances. Exceptions for classes of Federal awards or non-Federal entities will be published on the OMB Web site at www.whitehouse.gov/omb.

(b) Exceptions on a case-by-case basis for individual non-Federal entities may be authorized by the HHS awarding agency or cognizant agency for indirect costs, except where otherwise required by law or where OMB or other approval is expressly required by this part.

(c) The HHS awarding agency may apply more restrictive requirements to a class of Federal awards or non-Federal entities when approved by OMB, or when required by Federal statutes or regulations, except for the requirements in subpart F of this part. An HHS awarding agency may apply less restrictive requirements when making fixed amount awards as defined in subpart A of this part, except for those requirements imposed by statute or in subpart F of this part.

(d) On a case-by-case basis, OMB will approve new strategies for Federal awards when proposed by the HHS awarding agency in accordance with OMB guidance (such as M-13-17) to develop additional evidence relevant to addressing important policy challenges or to promote cost-effectiveness in and across Federal programs. Proposals may draw on the innovative program designs discussed in M-13-17

to expand or improve the use of effective practices in delivering Federal financial assistance while also encouraging innovation in service delivery. Proposals submitted to OMB in accordance with M-13-17 may include requests to waive requirements other than those in subpart F of this part.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3014, Jan. 20, 2016]

§75.103 Authorities.

This part is issued under the following authorities.

(a) Subpart B of this part through subpart D of this part are authorized under 31 U.S.C. 503 (the Chief Financial Officers Act, Functions of the Deputy Director for Management), 31 U.S.C. 1111 (Improving Economy and Efficiency of the United States Government), 41 U.S.C. 1101-1131 (the Office of Federal Procurement Policy Act), Reorganization Plan No. 2 of 1970, and Executive Order 11541 Prescribing the Duties of the Office of Management and Budget and the Domestic Policy Council in the Executive Office of the President, the Single Audit Act Amendments of 1996, (31 U.S.C. 7501-7507), as well as The Federal Program Information Act (Public Law 95-220 and Public Law 98-169, as amended, codified at 31 U.S.C. 6101-6106).

(b) Subpart E of this part is authorized under the Budget and Accounting Act of 1921, as amended; the Budget and Accounting Procedures Act of 1950, as amended (31 U.S.C. 1101-1125); the Chief Financial Officers Act of 1990 (31 U.S.C. 503-504); Reorganization Plan No. 2 of 1970; and Executive Order No. 11541 Prescribing the Duties of the Office of Management and Budget and the Domestic Policy Council in the Executive Office of the President.

(c) Subpart F of this part is authorized under the Single Audit Act Amendments of 1996, (31 U.S.C. 7501-7507).

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3014, Jan. 20, 2016]

§75.104 Supersession.

As described in §75.110, this part supersedes:

(a) The following OMB guidance documents and regulations under Title 2 of the Code of Federal Regulations:

(1) A-21, "Cost Principles for Educational Institutions" (2 CFR part 220);

(2) A-87, "Cost Principles for State, Local and Indian Tribal Governments" (2 CFR part 225) and also FEDERAL REGISTER notice 51 FR 552 (January 6, 1986);

(3) A-89, "Federal Domestic Assistance Program Information";

(4) A-102, "Grant Awards and Cooperative Agreements with State and Local Governments";

(5) A-110, "Uniform Administrative Requirements for Awards and Other Agreements with Institutions of Higher Education, Hospitals, and Other Nonprofit Organizations" (codified at 2 CFR 215);

(6) A-122, "Cost Principles for Non-Profit Organizations" (2 CFR part 230);

(7) A-133, "Audits of States, Local Governments and Non-Profit Organizations", and

(8) Those sections of A-50 related to audits performed under subpart F of this part.

(b) This part also supersedes HHS' regulations at 45 CFR parts 74 and 92.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3014, Jan. 20, 2016]

§75.105 Effect on other issuances.

For Federal awards subject to this part, all administrative requirements, program manuals, handbooks and other non-regulatory materials that are inconsistent with the requirements of this part are superseded upon implementation of this part by the HHS awarding agency, except to the extent they are required by statute or authorized in accordance with the provisions in §75.102.

§75.106 Agency implementation.

HHS is implementing the language in 2 CFR part 200 in these codified regulations.

§75.107 OMB responsibilities.

OMB will review HHS agency regulations and implementation of 2 CFR part 200, and will provide interpretations of policy requirements and assistance to ensure effective and efficient implementation. Any exceptions will be subject to approval by OMB. Exceptions will only be made in particular cases where adequate justification is presented.

§75.108 Inquiries.

Inquiries concerning 2 CFR part 200 may be directed to the Office of Federal Financial Management, Office of Management and Budget, in Washington, DC. Inquiries concerning 45 CFR part 75 should be addressed to the HHS awarding agency, cognizant agency for indirect costs, cognizant or oversight agency for audit, or pass-through entity as appropriate.

§75.109 Review date.

OMB will review 2 CFR part 200 and HHS will review 45 part 75 at least every five years after December 26, 2013.

§75.110 Effective/Applicability date.

(a) The standards set forth in this part which affect administration of Federal awards issued by HHS agencies become effective December 26, 2014 unless different provisions are required by statute or approved by OMB. For the procurement standards in 45 CFR 75.326 through 75.355, non-Federal entities may continue to comply with the procurement standards in previous OMB guidance (superseded by this part as described in 45 CFR 75.104) for two additional fiscal years after this part goes into effect. If a non-Federal entity chooses to use the previous procurement standards for an additional two fiscal years before adopting the procurement standards in this part, the non-Federal entity must document this decision in their internal procurement policies.

(b) The standards set forth in subpart F of this part and any other standards which apply directly to HHS agencies will be effective December 26, 2013, and will apply to audits of fiscal years beginning on or after December 26, 2014.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3014, Jan. 20, 2016]

§75.111 English language.

(a) All Federal financial assistance announcements and Federal award information must be in the English language. Applications must be submitted in the English language and must be in the terms of U.S. dollars. If the HHS awarding agency receives applications in another currency, the HHS awarding agency will evaluate the application by converting the foreign currency to United States currency using the date specified for receipt of the application.

(b) Non-Federal entities may translate the Federal award and other documents into another language. In the event of inconsistency between any terms and conditions of the Federal award and any translation into another language, the English language meaning will control. Where a significant portion of the non-Federal entity's employees who are working on the Federal award are not fluent in English, the non-Federal entity must provide the Federal award in English and the language(s) with which employees are more familiar.

§75.112 Conflict of interest.

(a) HHS awarding agencies must establish conflict of interest policies for Federal awards. The non-Federal entity must disclose in writing any potential conflict of interest to the respective HHS awarding agency or pass-through entity in accordance with applicable HHS awarding agency's policy. As a general matter, HHS awarding agencies' conflict of interest policies must:

(1) Address conditions under which outside activities, relationships, or financial interests are proper or improper;

(2) Provide for advance notification of outside activities, relationships, or financial interests, and a process of review as appropriate; and

(3) Outline how financial conflicts of interest may be addressed.

(b) Agencies with Public Health Service (PHS) funded research will ensure that any conflict of interest policies are aligned with the requirements of 42 CFR part 50, subpart F.

§75.113 Mandatory disclosures.

The non-Federal entity or applicant for a Federal award must disclose, in a timely manner, in writing to the HHS awarding agency or pass-through entity all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award. Non-Federal entities that have received a Federal award including the term and condition outlined in Appendix XII are required to report certain civil, criminal, or administrative proceedings to SAM. Failure to make required disclosures can result in any of the remedies described in §75.371, including suspension or debarment. (See also 2 CFR parts 180 and 376, and 31 U.S.C. 3321).

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3014, Jan. 20, 2016]

Subpart C—Pre-Federal Award Requirements and Contents of Federal Awards

§75.200 Purpose.

(a) Sections 75.201 through 75.208 prescribe instructions and other pre-award matters to be used in the announcement and application process.

(b) Use of §§75.203, 75.204, 75.205, and 75.207, is required only for competitive Federal awards, but may also be used by the HHS awarding agency for non-competitive awards where appropriate or where required by Federal statute.

§75.201 Use of grant agreements (including fixed amount awards), cooperative agreements, and contracts.

(a) The HHS awarding agency or pass-through entity must decide on the appropriate instrument for the Federal award (*i.e.*, grant agreement, cooperative agreement, or contract) in accordance with the Federal Grant and Cooperative Agreement Act (31 U.S.C. 6301-08).

(b) Fixed Amount Awards. In addition to the options described in paragraph (a) of this section, HHS awarding agencies, or pass-through entities as permitted in §75.353, may use fixed amount awards (see §75.2 *Fixed amount awards*) to which the following conditions apply:

(1) The Federal award amount is negotiated using the cost principles (or other pricing information) as a guide. The HHS awarding agency or pass-through entity may use fixed amount awards if the project scope is specific and if adequate cost, historical, or unit pricing data is available to establish a fixed amount award based on a reasonable estimate of actual cost. Payments are based on meeting specific requirements of the Federal award. Accountability is based on performance and results. Except in the case of termination before completion of the Federal award, there is no governmental review of the actual costs incurred by the non-Federal entity in performance of the award. Some of the ways in which the Federal award may be paid include, but are not limited to:

(i) In several partial payments, the amount of each agreed upon in advance, and the “milestone” or event triggering the payment also agreed upon in advance, and set forth in the Federal award;

(ii) On a unit price basis, for a defined unit or units, at a defined price or prices, agreed to in advance of performance of the Federal award and set forth in the Federal award; or,

(iii) In one payment at Federal award completion.

(2) A fixed amount award cannot be used in programs which require mandatory cost sharing or match.

(3) The non-Federal entity must certify in writing to the HHS awarding agency or pass-through entity at the end of the Federal award that the project or activity was completed or the level of effort was expended. If the required level of activity or effort was not carried out, the amount of the Federal award must be adjusted.

(4) Periodic reports may be established for each Federal award.

(5) Changes in principal investigator, project leader, project partner, or scope of effort must receive the prior written approval of the HHS awarding agency or pass-through entity.

§75.202 Requirement to provide public notice of Federal financial assistance programs.

(a) The HHS awarding agency must notify the public of Federal programs in the Catalog of Federal Domestic Assistance (CFDA), maintained by the General Services Administration (GSA).

(1) The CFDA, or any OMB-designated replacement, is the single, authoritative, government-wide comprehensive source of Federal financial assistance program information produced by the executive branch of the Federal Government.

(2) The information that the HHS awarding agency must submit to GSA for approval by OMB is listed in paragraph (b) of this section. GSA must prescribe the format for the submission.

(3) The HHS awarding agency may not award Federal financial assistance without assigning it to a program that has been included in the CFDA as required in this section unless there are exigent circumstances requiring otherwise, such as timing requirements imposed by statute.

(b) For each program that awards discretionary Federal awards, non-discretionary Federal awards, loans, insurance, or any other type of Federal financial assistance, the HHS awarding agency must submit the following information to GSA:

(1) Program Description, Purpose, Goals and Measurement. A brief summary of the statutory or regulatory requirements of the program and its intended outcome. Where appropriate, the Program Description, Purpose, Goals, and Measurement should align with the strategic goals and objectives within the HHS awarding agency's performance plan and should support the HHS awarding agency's performance measurement, management, and reporting as required by Part 6 of OMB Circular A-11;

(2) Identification of whether the program makes Federal awards on a discretionary basis or the Federal awards are prescribed by Federal statute, such as in the case of formula grants.

(3) Projected total amount of funds available for the program. Estimates based on previous year funding are acceptable if current appropriations are not available at the time of the submission;

(4) Anticipated Source of Available Funds: The statutory authority for funding the program and, to the extent possible, agency, sub-agency, or, if known, the specific program unit that will issue the Federal awards, and associated funding identifier (e.g., Treasury Account Symbol(s));

(5) General Eligibility Requirements: The statutory, regulatory or other eligibility factors or considerations that determine the applicant's qualification for Federal awards under the program (e.g., type of non-Federal entity); and

(6) Applicability of Single Audit Requirements as required by subpart F of this part.

§75.203 Notices of funding opportunities.

For competitive grants and cooperative agreements, the HHS awarding agency must announce specific funding opportunities by providing the following information in a public notice:

(a) *Summary Information in Notices of Funding Opportunities.* The HHS awarding agency must display the following information posted on the OMB-designated government-wide Web site for finding and applying for Federal financial assistance, in a location preceding the full text of the announcement:

(1) HHS Awarding Agency Name;

(2) Funding Opportunity Title;

(3) Announcement Type (whether the funding opportunity is the initial announcement of this funding opportunity or a modification of a previously announced opportunity);

(4) Funding Opportunity Number (required, if applicable). If the HHS awarding agency has assigned or will assign a number to the funding opportunity announcement, this number must be provided;

(5) Catalog of Federal Domestic Assistance (CFDA) Number(s);

(6) Key Dates. Key dates include due dates for applications or Executive Order 12372 submissions, as well as for any letters of intent or pre-applications. For any announcement issued before a program's application materials are available, key dates also include the date on which those materials will be released; and any other additional information, as deemed applicable by the relevant HHS awarding agency.

(b) The HHS awarding agency must generally make all funding opportunities available for application for at least 60 calendar days. The HHS awarding agency may make a determination to have a less than 60 calendar day availability period but no funding opportunity should be available for less than 30 calendar days unless exigent circumstances require as determined by the HHS awarding agency head or delegate.

(c) *Full Text of Funding Opportunities.* The HHS awarding agency must include the following information in the full text of each funding opportunity. For specific instructions on the content required in this section, refer to appendix I of this part.

(1) Full programmatic description of the funding opportunity.

(2) Federal award information, including sufficient information to help an applicant make an informed decision about whether to submit an application. (See also §75.414(c)(4)).

(3) Specific eligibility information, including any factors or priorities that affect an applicant's or its application's eligibility for selection.

(4) Application Preparation and Submission Information, including the applicable submission dates and time.

(5) Application Review Information including the criteria and process to be used to evaluate applications. See also §§75.204 and 75.205.

(6) Federal Award Administration Information. See also §75.210.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3014, Jan. 20, 2016]

§75.204 HHS funding agency review of merit of proposals.

For competitive grants or cooperative agreements, unless prohibited by Federal statute, the HHS awarding agency must design and execute a merit review process for applications. This process must be described or incorporated by reference in the applicable funding opportunity (see appendix I to this part.) See also §75.203.

§75.205 HHS awarding agency review of risk posed by applicants.

(a) *Review of OMB-designated repositories of governmentwide data.* (1) Prior to making a Federal award, the HHS awarding agency is required by 31 U.S.C. 3321 and 41 U.S.C. 2313 note to review information available through any OMB-designated repositories of governmentwide eligibility qualification or financial integrity information as appropriate. See also suspension and debarment requirements at 2 CFR parts 180 and 376.

(2) In accordance 41 U.S.C. 2313, the HHS awarding agency is required to review the non-public segment of the OMB-designated integrity and performance system accessible through SAM (currently the

Federal Awardee Performance and Integrity Information System (FAPIIS)) prior to making a Federal award where the Federal share is expected to exceed the simplified acquisition threshold, defined in 41 U.S.C. 134, over the period of performance. At a minimum, the information in the system for a prior Federal award recipient must demonstrate a satisfactory record of executing programs or activities under Federal grants, cooperative agreements, or procurement awards; and integrity and business ethics. The HHS awarding agency may make a Federal award to a recipient who does not fully meet these standards, if it is determined that the information is not relevant to the current Federal award under consideration or there are specific conditions that can appropriately mitigate the effects of the non-Federal entity's risk in accordance with §75.207.

(b) In addition, for competitive grants or cooperative agreements, the HHS awarding agency must have in place a framework for evaluating the risks posed by applicants before they receive Federal awards. This evaluation may incorporate results of the evaluation of the applicant's eligibility or the quality of its application. If the HHS awarding agency determines that a Federal award will be made, special conditions that correspond to the degree of risk assessed may be applied to the Federal award. Criteria to be evaluated must be described in the announcement of funding opportunity described in §75.203.

(c) In evaluating risks posed by applicants, the HHS awarding agency may use a risk-based approach and may consider any items such as the following:

(1) Financial stability;

(2) Quality of management systems and ability to meet the management standards prescribed in this part;

(3) History of performance. The applicant's record in managing Federal awards, if it is a prior recipient of Federal awards, including timeliness of compliance with applicable reporting requirements, conformance to the terms and conditions of previous Federal awards, and if applicable, the extent to which any previously awarded amounts will be expended prior to future awards;

(4) Reports and findings from audits performed under subpart F of this part or the reports and findings of any other available audits; and

(5) The applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-Federal entities.

(d) In addition to this review, the HHS awarding agency must comply with the guidelines on government-wide suspension and debarment in 2 CFR part 180, and must require non-Federal entities to comply with these provisions. These provisions restrict Federal awards, subawards and contracts with certain parties that are debarred, suspended or otherwise excluded from or ineligible for participation in Federal programs or activities.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3014, Jan. 20, 2016; 81 FR 19044, Apr. 4, 2016]

§75.206 Standard application requirements, including forms for applying for HHS financial assistance, and state plans.

(a) *Paperwork clearances.* The HHS awarding agency may only use application information collections approved by OMB under the Paperwork Reduction Act of 1995 and OMB's implementing regulations in 5 CFR part 1320, Controlling Paperwork Burdens on the Public. Consistent with these requirements, OMB will authorize additional information collections only on a limited basis.

(b) If applicable, the HHS awarding agency may inform applicants and recipients that they do not need to provide certain information otherwise required by the relevant information collection.

(c) *Forms for applying for HHS financial assistance.* HHS awarding agencies should use the Standard Form 424 (SF-424 Application for Federal Assistance) series (or its successor) and its program narrative whenever possible. Alternative mechanisms may be used for formula grant programs which do not require applicants to apply for funds on a project basis.

(1) Applicants shall use the SF-424 series or those forms and instructions prescribed by the HHS awarding agency.

(2) For Federal programs covered by Executive Order 12372, as amended by Executive Order 12416, the applicant shall complete the appropriate sections of the SF-424 indicating whether the application was subject to review by the State Single Point of Contact (SPOC). The name and address of the SPOC for a particular State can be obtained from the HHS awarding agency or the Catalog of Federal Domestic Assistance. The SPOC shall advise the applicant whether the program for which application is made has been selected by that State for review. (See also 45 CFR part 100.)

(3) HHS awarding agencies that do not use the SF-424 series will indicate on the application form they prescribe whether the application is subject to review by the State under Executive Order 12372.

(4) This section does not apply to applications for subawards.

(5) Except where otherwise noted, or granted by HHS deviation, HHS awarding agencies shall direct applicants to apply for HHS financial assistance through Grants.gov, an OMB-designated Web site for Find and Apply.

(d) *State plans.* The statutes for some programs require States to submit plans before receiving grants. Under regulations implementing Executive Order 12372, States are allowed to simplify, consolidate and substitute plans. This section contains additional provisions for plans that are subject to regulations implementing Executive Order 12372.

(1) *Requirements.* A State need meet only Federal administrative or programmatic requirements for a plan that are in statutes or codified regulations.

(2) *Assurances.* In each plan, the State will include an assurance that the State will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding. For this assurance and other assurances required in this plan, the State may:

(i) Cite by number the statutory or regulatory provisions requiring the assurances and affirm that it gives the assurances required by those provisions,

(ii) Repeat the assurance language in the statutes or regulations, or

(iii) Develop its own language to the extent permitted by law.

(3) *Amendments.* A State will amend a plan whenever necessary to reflect:

(i) New or revised Federal statutes or regulations, or

(ii) A material change in any State law, organization, policy, or State agency operation. The State will obtain approval for the amendment and its effective date but need submit for approval only the amended portions of the plan.

§75.207 Specific award conditions.

(a) The HHS awarding agency or pass-through entity may impose additional specific award conditions as needed in accordance with paragraphs (b) and (c) of this section, under the following circumstances:

(1) Based on the criteria set forth in §75.205;

(2) When an applicant or recipient has a history of failure to comply with the general or specific terms and conditions of a Federal award;

(3) When an applicant or recipient fails to meet expected performance goals as described in §75.210, or;

(4) When an applicant or recipient is not otherwise responsible.

(b) These additional Federal award conditions may include items such as the following:

(1) Requiring payments as reimbursements rather than advance payments;

(2) Withholding authority to proceed to the next phase until receipt of evidence of acceptable performance within a given period of performance;

(3) Requiring additional, more detailed financial reports;

(4) Requiring additional project monitoring;

(5) Requiring the non-Federal entity to obtain technical or management assistance; or

(6) Establishing additional prior approvals.

(c) The HHS awarding agency or pass-through entity must notify the applicant or non-Federal entity as to:

(1) The nature of the additional requirements;

(2) The reason why the additional requirements are being imposed;

(3) The nature of the action needed to remove the additional requirement, if applicable;

(4) The time allowed for completing the actions if applicable, and

(5) The method for requesting reconsideration of the additional requirements imposed.

(d) Any specific conditions must be promptly removed once the conditions that prompted them have been corrected.

§75.208 Certifications and representations.

Unless prohibited by Federal statutes or regulations, each HHS awarding agency or pass-through entity is authorized to require the non-Federal entity to submit certifications and representations required by Federal statutes, or regulations on an annual basis. Submission may be required more frequently if the non-Federal entity fails to meet a requirement of a Federal award.

(a) The funds governed under this part shall be administered in compliance with the standards set forth in 45 CFR part 87.

(b) For assurances under State plans, see §75.206(d)(2).

§75.209 Pre-award costs.

For requirements on costs incurred by the applicant prior to the start date of the period of performance of the Federal award, see §75.458.

§75.210 Information contained in a Federal award.

A Federal award must include the following information:

(a) *General Federal award information.* The HHS awarding agency must include the following general Federal award information in each Federal award:

(1) Recipient name (which must match the name associated with its unique entity identifier as defined in 2 CFR 25.315);

(2) Recipient's unique entity identifier;

(3) Unique Federal Award Identification Number (FAIN);

(4) Federal Award Date (see §75.2 *Federal award date*);

(5) Period of Performance Start and End Date;

(6) Amount of Federal Funds Obligated by this action,

(7) Total Amount of Federal Funds Obligated;

(8) Total Amount of the Federal Award;

(9) Budget Approved by the HHS Awarding Agency;

(10) Total Approved Cost Sharing or Matching, where applicable;

(11) Federal award project description (to comply with statutory requirements (e.g., FFATA));

(12) Name of HHS awarding agency and contact information for awarding official,

(13) CFDA Number and Program Name;

(14) Identification of whether the award is R&D; and

(15) Indirect cost rate for the Federal award (including if the de minimis rate is charged per §75.414).

(b) *General terms and conditions.* (1) HHS awarding agencies must incorporate the following general terms and conditions either in the Federal award or by reference, as applicable:

(i) Administrative requirements implemented by the HHS awarding agency as specified in this part.

(ii) National policy requirements. These include statutory, executive order, other Presidential directive, or regulatory requirements that apply by specific reference and are not program-specific. See §75.300.

(iii) Recipient integrity and performance matters. If the total Federal share of the Federal award may include more than \$500,000 over the period of performance, the HHS awarding agency must include the term and condition available in appendix XII. See also §75.113.

(2) The Federal award must include wording to incorporate, by reference, the applicable set of general terms and conditions. The reference must be to the Web site at which the HHS awarding agency maintains the general terms and conditions.

(3) If a non-Federal entity requests a copy of the full text of the general terms and conditions, the HHS awarding agency must provide it.

(4) Wherever the general terms and conditions are publicly available, the HHS awarding agency must maintain an archive of previous versions of the general terms and conditions, with effective dates, for use by the non-Federal entity, auditors, or others.

(c) *HHS awarding agency, program, or Federal award specific terms and conditions.* The HHS awarding agency may include with each Federal award any terms and conditions necessary to communicate requirements that are in addition to the requirements outlined in the HHS awarding agency's general terms and conditions. Whenever practicable, these specific terms and conditions also should be shared on a public Web site and in notices of funding opportunities (as outlined in §75.203) in addition to being included in a Federal award. See also §75.206.

(d) *Federal award performance goals.* The HHS awarding agency must include in the Federal award an indication of the timing and scope of expected performance by the non-Federal entity as related to the outcomes intended to be achieved by the program. In some instances (e.g., discretionary research awards), this may be limited to the requirement to submit technical performance reports (to be evaluated in accordance with HHS awarding agency policy). Where appropriate, the Federal award may include specific performance goals, indicators, milestones, or expected outcomes (such as outputs, or services performed or public impacts of any of these) with an expected timeline for accomplishment. Reporting requirements must be clearly articulated such that, where appropriate, performance during the execution of the Federal award has a standard against which non-Federal entity performance can be measured. The HHS awarding agency may include program-specific requirements, as applicable. These requirements should be aligned with agency strategic goals, strategic objectives or performance goals that are relevant to the program. See also OMB Circular A-11 Preparation, Submission and Execution of the Budget, Part 6 for definitions of strategic objectives and performance goals.

(e) Any other information required by the HHS awarding agency.

§75.211 Public access to Federal award information.

(a) In accordance with statutory requirements for Federal spending transparency (e.g., FFATA), except as noted in this section, for applicable Federal awards the HHS awarding agency must announce all Federal awards publicly and publish the required information on a publicly available OMB-designated government-wide Web site (at time of publication, *www.USAspending.gov*).

(b) All information posted in the designated integrity and performance system accessible through SAM (currently FAPIIS) on or after April 15, 2011 will be publicly available after a waiting period of 14 calendar days, except for:

(1) Past performance reviews required by Federal Government contractors in accordance with the Federal Acquisition Regulation (FAR) 42.15;

(2) Information that was entered prior to April 15, 2011; or

(3) Information that is withdrawn during the 14-calendar day waiting period by the Federal Government official.

(c) Nothing in this section may be construed as requiring the publication of information otherwise exempt under the Freedom of Information Act (5 U.S.C. 552), or controlled unclassified information pursuant to Executive Order 13556.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3015, Jan. 20, 2016]

§75.212 Reporting a determination that a recipient is not qualified for a Federal award.

(a) If an HHS awarding agency does not make a Federal award to a non-Federal entity because the official determines that the non-Federal entity does not meet either or both of the minimum qualification standards as described in §75.205(a)(2), the HHS awarding agency must report that determination to the designated integrity and performance system accessible through SAM (currently FAPIIS), only if all of the following apply:

(1) The only basis for the determination described in paragraph (a) of this section is the non-Federal entity's prior record of executing programs or activities under Federal awards or its record of integrity and business ethics, as described in §75.205(a)(2), (*i.e.*, the entity was determined to be qualified based on all factors other than those two standards), and

(2) The total Federal share of the Federal award that otherwise would be made to the non-Federal entity is expected to exceed the simplified acquisition threshold over the period of performance.

(b) The HHS awarding agency is not required to report a determination that a non-Federal entity is not qualified for a Federal award if it makes the Federal award to the non-Federal entity and includes specific award terms and conditions, as described in §75.207.

(c) If an HHS awarding agency reports a determination that a non-Federal entity is not qualified for a Federal award, as described in paragraph (a) of this section, the HHS awarding agency also must notify the non-Federal entity that—

(1) The determination was made and reported to the designated integrity and performance system accessible through SAM, and include with the notification an explanation of the basis for the determination;

(2) The information will be kept in the system for a period of five years from the date of the determination, as required by section 872 of Public Law 110-417, as amended (41 U.S.C. 2313), then archived;

(3) Each HHS awarding agency that considers making a Federal award to the non-Federal entity during that five year period must consider that information in judging whether the non-Federal entity is qualified to receive the Federal award when the total Federal share of the Federal award is expected to include an amount of Federal funding in excess of the simplified acquisition threshold over the period of performance;

(4) The non-Federal entity may go to the awardee integrity and performance portal accessible through SAM (currently the Contractor Performance Assessment Reporting System (CPARS)) and comment on any information the system contains about the non-Federal entity itself; and

(5) HHS awarding agencies will consider that non-Federal entity's comments in determining whether the non-Federal entity is qualified for the future Federal award.

(d) If an HHS awarding agency enters information into the designated integrity and performance system accessible through SAM about a determination that a non-Federal entity is not qualified for a Federal award and subsequently:

(1) Learns that any of that information is erroneous, the HHS awarding agency must correct the information in the system within three business days;

(2) Obtains an update to that information that could be helpful to other Federal awarding agencies, the HHS awarding agency is strongly encouraged to amend the information in the system to incorporate the update in a timely way.

(e) HHS awarding agencies shall not post any information that will be made publicly available in the non-public segment of the designated integrity and performance system that is covered by a disclosure exemption under the Freedom of Information Act. If the recipient asserts within seven calendar days to the HHS awarding agency that posted the information that some or all of the information made publicly available is covered by a disclosure exemption under the Freedom of Information Act, the HHS awarding agency that posted the information must remove the posting within seven calendar days of receiving the assertion. Prior to reposting the releasable information, the HHS awarding agency must resolve the issue in accordance with the agency's Freedom of Information Act procedures.

[81 FR 3015, Jan. 20, 2016]

§75.213 Suspension and debarment.

Non-federal entities are subject to the non-procurement debarment and suspension regulations implementing Executive Orders 12549 and 12689, 2 CFR parts 180 and 376. These regulations restrict awards, subawards and contracts with certain parties that are debarred, suspended or otherwise excluded from or ineligible for participation in Federal assistance programs or activities.

[79 FR 75889, Dec. 19, 2014. Redesignated and amended at 81 FR 3015, 3016, Jan. 20, 2016]

§75.214 Metric system of measurement.

The Metric Conversion Act, as amended by the Omnibus Trade and Competitiveness Act, 15 U.S.C. 205, declares that the metric system is the preferred measurement system for United States trade and commerce. HHS awarding agencies will follow the provisions of Executive Order 12770.

[79 FR 75889, Dec. 19, 2014. Redesignated at 81 FR 3015, Jan. 20, 2016]

§75.215 Disclosure of lobbying activities.

Recipients are subject to the restrictions on lobbying as set forth in 45 CFR part 93.

[79 FR 75889, Dec. 19, 2014. Redesignated at 81 FR 3015, Jan. 20, 2016]

§75.216 Special provisions for awards to commercial organizations as recipients.

(a) This section contains provisions that apply to awards to commercial organizations. These provisions are in addition to other applicable provisions of this part, or they make exceptions from other provisions of this part for awards to commercial organizations.

(b) Prohibition against profit. Except for awards under the Small Business Innovation Research (SBIR) and Small Business Technology Transfer Research (STTR) programs (15 U.S.C. 638), no HHS funds may be paid as profit to any recipient even if the recipient is a commercial organization. Profit is any amount in excess of allowable direct and indirect costs.

(c) Program Income. Except for grants for research, program income earned by a commercial organization may not be used to further eligible project or program objectives except in the SBIR and STTR programs.

(d)(1) Commercial organizations that receive awards (including for-profit hospitals) have two options regarding audits:

(i) A financial related audit of a particular award in accordance with Generally Accepted Government Auditing Standards issued by the Comptroller General of the United States, in those cases where the commercial organization receives awards under only one HHS program; or, if awards are received under multiple HHS programs, a financial related audit of all awards in accordance with Generally Accepted Government Auditing Standards issued by the Comptroller General of the United States; or

(ii) An audit that meets the requirements contained in subpart F.

(2) Commercial organizations that receive annual awards totaling less than the audit requirement threshold in subpart F are exempt from HHS audit requirements for that year, but records must be available for review by appropriate officials of Federal agencies or the Government Accountability Office. (See §75.501).

[79 FR 75889, Dec. 19, 2014. Redesignated at 81 FR 3015, Jan. 20, 2016]

§75.217 Special provisions for awards to Federal agencies.

(a) In order for an HHS awarding agency to make a Federal award to a Federal agency, the HHS awarding agency must have statutory authority that makes such Federal agency explicitly eligible for a Federal award.

(b) All provisions of this part and other HHS regulations apply to Federal entities receiving Federal awards, except for the following:

(1) Except for grants for research, any program income earned by a Federal institution must be used under the deduction alternative. Any program income earned after the end of grant support should be returned to the United States Treasury.

(2) No salary or fringe benefit payments may be made from HHS awarding agency grant funds to support career, career-conditional, or other Federal employees (civilian or uniformed services) without permanent appointments at a Federal institution receiving a grant. While the level of effort required for the project must be allowed by the recipient as part of each individual's official duties, salary costs associated with an individual participating in an official capacity as a Federal employee under a grant to that Federal institution are not allowable costs under an HHS awarding agency grant.

(3) Federal agencies may not be reimbursed for indirect costs under Federal awards.

[79 FR 75889, Dec. 19, 2014. Redesignated at 81 FR 3015, Jan. 20, 2016]

§75.218 Participation by faith-based organizations.

The funds provided under this part must be administered in compliance with the standards set forth in 45 CFR part 87.

[79 FR 75889, Dec. 19, 2014. Redesignated at 81 FR 3015, Jan. 20, 2016]

Subpart D—Post Federal Award Requirements

STANDARDS FOR FINANCIAL AND PROGRAM MANAGEMENT

§75.300 Statutory and national policy requirements.

(a) The Federal awarding agency must manage and administer the Federal award in a manner so as to ensure that Federal funding is expended and associated programs are implemented in full accordance with U.S. statutory and public policy requirements: Including, but not limited to, those protecting public welfare, the environment, and prohibiting discrimination. The Federal awarding agency must communicate to the non-Federal entity all relevant public policy requirements, including those in general appropriations provisions, and incorporate them either directly or by reference in the terms and conditions of the Federal award.

(b) The non-Federal entity is responsible for complying with all requirements of the Federal award. For all Federal awards, this includes the provisions of FFATA, which includes requirements on executive compensation, and also requirements implementing the Act for the non-Federal entity at 2 CFR part 25 and 2 CFR part 170. See also statutory requirements for whistleblower protections at 10 U.S.C. 2324 and 2409, and 41 U.S.C. 4304, 4310, and 4712.

§75.301 Performance measurement.

The HHS awarding agency must require the recipient to use OMB approved standard information collections when providing financial and performance information. As appropriate and in accordance with above mentioned information collections, the HHS awarding agency must require the recipient to relate financial data to performance accomplishments of the Federal award. Also, in accordance with above mentioned standard information collections, and when applicable, recipients must also provide cost information to demonstrate cost effective practices (*e.g.*, through unit cost data). The recipient's performance should be measured in a way that will help the HHS awarding agency and other non-Federal entities to improve program outcomes, share lessons learned, and spread the adoption of promising practices. The HHS awarding agency should provide recipients with clear performance goals, indicators, and milestones as described in §75.210. Performance reporting frequency and content should be established to not only allow the HHS awarding agency to understand the recipient progress but also to facilitate identification of promising practices among recipients and build the evidence upon which the HHS awarding agency's program and performance decisions are made.

§75.302 Financial management and standards for financial management systems.

(a) Each state must expend and account for the Federal award in accordance with state laws and procedures for expending and accounting for the state's own funds. In addition, the state's and the other non-Federal entity's financial management systems, including records documenting compliance with Federal statutes, regulations, and the terms and conditions of the Federal award, must be sufficient to permit the preparation of reports required by general and program-specific terms and conditions; and the tracing of funds to a level of expenditures adequate to establish that such funds have been used according to the Federal statutes, regulations, and the terms and conditions of the Federal award. See also §75.450.

(b) The financial management system of each non-Federal entity must provide for the following (see also §§75.361, 75.362, 75.363, 75.364, and 75.365):

(1) Identification, in its accounts, of all Federal awards received and expended and the Federal programs under which they were received. Federal program and Federal award identification must include, as applicable, the CFDA title and number, Federal award identification number and year, name of the HHS awarding agency, and name of the pass-through entity, if any.

(2) Accurate, current, and complete disclosure of the financial results of each Federal award or program in accordance with the reporting requirements set forth in §§75.341 and 75.342. If an HHS awarding agency requires reporting on an accrual basis from a recipient that maintains its records on other than an accrual basis, the recipient must not be required to establish an accrual accounting system. This recipient may develop accrual data for its reports on the basis of an analysis of the documentation on hand. Similarly, a pass-through entity must not require a subrecipient to establish an accrual accounting system and must allow the subrecipient to develop accrual data for its reports on the basis of an analysis of the documentation on hand.

(3) Records that identify adequately the source and application of funds for federally-funded activities. These records must contain information pertaining to Federal awards, authorizations, obligations, unobligated balances, assets, expenditures, income and interest and be supported by source documentation.

(4) Effective control over, and accountability for, all funds, property, and other assets. The non-Federal entity must adequately safeguard all assets and assure that they are used solely for authorized purposes. See §75.303.

(5) Comparison of expenditures with budget amounts for each Federal award.

(6) Written procedures to implement the requirements of §75.305.

(7) Written procedures for determining the allowability of costs in accordance with subpart E of this part and the terms and conditions of the Federal award.

§75.303 Internal controls.

The non-Federal entity must:

(a) Establish and maintain effective internal control over the Federal award that provides reasonable assurance that the non-Federal entity is managing the Federal award in compliance with Federal statutes, regulations, and the terms and conditions of the Federal award. These internal controls should be in compliance with guidance in "Standards for Internal Control in the Federal Government," issued by the

Comptroller General of the United States or the "Internal Control Integrated Framework," issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

(b) Comply with Federal statutes, regulations, and the terms and conditions of the Federal awards.

(c) Evaluate and monitor the non-Federal entity's compliance with statutes, regulations and the terms and conditions of Federal awards.

(d) Take prompt action when instances of noncompliance are identified including noncompliance identified in audit findings.

(e) Take reasonable measures to safeguard protected personally identifiable information and other information the HHS awarding agency or pass-through entity designates as sensitive or the non-Federal entity considers sensitive consistent with applicable Federal, state, local, and tribal laws regarding privacy and obligations of confidentiality.

§75.304 Bonds.

The HHS awarding agency may include a provision on bonding, insurance, or both in the following circumstances:

(a) Where the Federal Government guarantees or insures the repayment of money borrowed by the recipient, the HHS awarding agency, at its discretion, may require adequate bonding and insurance if the bonding and insurance requirements of the non-Federal entity are not deemed adequate to protect the interest of the Federal Government.

(b) The HHS awarding agency may require adequate fidelity bond coverage where the non-Federal entity lacks sufficient coverage to protect the Federal Government's interest.

(c) Where bonds are required in the situations described above, the bonds must be obtained from companies holding certificates of authority as acceptable sureties, as prescribed in 31 CFR part 223.

§75.305 Payment.

(a) For states, payments are governed by Treasury-State CMIA agreements and default procedures codified at 31 CFR part 205 and TFM 4A-2000 Overall Disbursing Rules for All Federal Agencies.

(b) For non-Federal entities other than states, payments methods must minimize the time elapsing between the transfer of funds from the United States Treasury or the pass-through entity and the disbursement by the non-Federal entity whether the payment is made by electronic funds transfer, or issuance or redemption of checks, warrants, or payment by other means. See also §75.302(b)(6). Except as noted elsewhere in this part, HHS awarding agencies must require recipients to use only OMB-approved standard governmentwide information collection requests to request payment.

(1) The non-Federal entity must be paid in advance, provided it maintains or demonstrates the willingness to maintain both written procedures that minimize the time elapsing between the transfer of funds and disbursement by the non-Federal entity, and financial management systems that meet the standards for fund control and accountability as established in this part. Advance payments to a non-Federal entity must be limited to the minimum amounts needed and be timed to be in accordance with the actual, immediate cash requirements of the non-Federal entity in carrying out the purpose of the approved program or project. The timing and amount of advance payments must be as close as is administratively feasible to the actual disbursements by the non-Federal entity for direct program or

project costs and the proportionate share of any allowable indirect costs. The non-Federal entity must make timely payment to contractors in accordance with the contract provisions.

(2) Whenever possible, advance payments must be consolidated to cover anticipated cash needs for all Federal awards made by the HHS awarding agency to the recipient.

(i) Advance payment mechanisms include, but are not limited to, Treasury check and electronic funds transfer and must comply with applicable guidance in 31 CFR part 208.

(ii) Non-Federal entities must be authorized to submit requests for advance payments and reimbursements at least monthly when electronic fund transfers are not used, and as often as they like when electronic transfers are used, in accordance with the provisions of the Electronic Fund Transfer Act (15 U.S.C. 1693-1693r).

(3) Reimbursement is the preferred method when the requirements in paragraph (b) cannot be met, when the HHS awarding agency sets a specific condition per §75.207, or when the non-Federal entity requests payment by reimbursement. This method may be used on any Federal award for construction, or if the major portion of the construction project is accomplished through private market financing or Federal loans, and the Federal award constitutes a minor portion of the project. When the reimbursement method is used, the HHS awarding agency or pass-through entity must make payment within 30 calendar days after receipt of the billing, unless the HHS awarding agency or pass-through entity reasonably believes the request to be improper.

(4) If the non-Federal entity cannot meet the criteria for advance payments and the HHS awarding agency or pass-through entity has determined that reimbursement is not feasible because the non-Federal entity lacks sufficient working capital, the HHS awarding agency or pass-through entity may provide cash on a working capital advance basis. Under this procedure, the HHS awarding agency or pass-through entity must advance cash payments to the non-Federal entity to cover its estimated disbursement needs for an initial period generally geared to the non-Federal entity's disbursing cycle. Thereafter, the HHS awarding agency or pass-through entity must reimburse the non-Federal entity for its actual cash disbursements. Use of the working capital advance method of payment requires that the pass-through entity provide timely advance payments to any subrecipients in order to meet the subrecipient's actual cash disbursements. The working capital advance method of payment must not be used by the pass-through entity if the reason for using this method is the unwillingness or inability of the pass-through entity to provide timely advance payments to the subrecipient to meet the subrecipient's actual cash disbursements.

(5) Use of resources before requesting cash advance payments. To the extent available, the non-Federal entity must disburse funds available from program income (including repayments to a revolving fund), rebates, refunds, contract settlements, audit recoveries, and interest earned on such funds before requesting additional cash payments.

(6) Unless otherwise required by Federal statutes, payments for allowable costs by non-Federal entities must not be withheld at any time during the period of performance unless the conditions of §§75.207, subpart D of this part, 75.371, or one or more of the following applies:

(i) The non-Federal entity has failed to comply with the project objectives, Federal statutes, regulations, or the terms and conditions of the Federal award.

(ii) The non-Federal entity is delinquent in a debt to the United States as defined in OMB Guidance A-129 "Policies for Federal Credit Programs and Non-Tax Receivables."

(iii) A payment withheld for failure to comply with Federal award conditions, but without suspension of the Federal award, must be released to the non-Federal entity upon subsequent compliance. When a Federal award is suspended, payment adjustments will be made in accordance with §75.375.

(iv) A payment must not be made to a non-Federal entity for amounts that are withheld by the non-Federal entity from payment to contractors to assure satisfactory completion of work. A payment must be made when the non-Federal entity actually disburses the withheld funds to the contractors or to escrow accounts established to assure satisfactory completion of work.

(7) Standards governing the use of banks and other institutions as depositories of advance payments under Federal awards are as follows:

(i) The HHS awarding agency and pass-through entity must not require separate depository accounts for funds provided to a non-Federal entity or establish any eligibility requirements for depositories for funds provided to the non-Federal entity. However, the non-Federal entity must be able to account for the receipt, obligation and expenditure of funds.

(ii) Advance payments of Federal funds must be deposited and maintained in insured accounts whenever possible.

(8) The non-Federal entity must maintain advance payments of Federal awards in interest-bearing accounts, unless the following apply:

(i) The non-Federal entity receives less than \$120,000 in Federal awards per year.

(ii) The best reasonably available interest-bearing account would not be expected to earn interest in excess of \$500 per year on Federal cash balances.

(iii) The depository would require an average or minimum balance so high that it would not be feasible within the expected Federal and non-Federal cash resources.

(iv) A foreign government or banking system prohibits or precludes interest bearing accounts.

(9) Interest earned amounts up to \$500 per year may be retained by the non-Federal entity for administrative expense. Any additional interest earned on Federal advance payments deposited in interest-bearing accounts must be remitted annually to the Department of Health and Human Services Payment Management System (PMS) through an electronic medium using either Automated Clearing House (ACH) network or a Fedwire Funds Service payment. Remittances must include pertinent information of the payee and nature of the payment in the memo area (often referred to as “addenda records” by Financial Institutions) as that will assist in the timely posting of interest earned on federal funds. Pertinent details include the Payee Account Number (PAN) if the payment originated from PMS, or Agency information, if the payment originated from ASAP, NSF or another federal agency payment system. The remittance must be submitted as follows:

For ACH Returns:

Routing Number: 051036706

Account number: 303000

Bank Name and Location: Credit Gateway—ACH Receiver St. Paul, MN

For Fedwire Returns*:

Routing Number: 021030004

Account number: 75010501

Bank Name and Location: Federal Reserve Bank Treas NYC/Funds Transfer Division New York, NY

(* Please note organization initiating payment is likely to incur a charge from your Financial Institution for this type of payment)

For International ACH Returns:

Beneficiary Account: Federal Reserve Bank of New York/ITS (FRBNY/ITS)

Bank: Citibank N.A. (New York)

Swift Code: CITIUS33

Account Number: 36838868

Bank Address: 388 Greenwich Street, New York, NY 10013 USA

Payment Details (Line 70): Agency Name (abbreviated when possible) and ALC Agency POC: Michelle Haney, (301) 492-5065

For recipients that do not have electronic remittance capability, please make check** payable to:

“The Department of Health and Human Services”

Mail Check to Treasury approved lockbox:

HHS Program Support Center

P.O. Box 530231

Atlanta, GA 30353-0231

(** Please allow 4-6 weeks for processing of a payment by check to be applied to the appropriate PMS account)

Any additional information/instructions may be found on the PMS Web site at <http://www.dpm.psc.gov/>.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3016, Jan. 20, 2016]

§75.306 Cost sharing or matching.

(a) Under Federal research proposals, voluntary committed cost sharing is not expected. It cannot be used as a factor during the merit review of applications or proposals, but may be considered if it is both in accordance with HHS awarding agency regulations and specified in a notice of funding opportunity. Criteria for considering voluntary committed cost sharing and any other program policy factors that may be used to determine who may receive a Federal award must be explicitly described in the notice of funding opportunity. Furthermore, only mandatory cost sharing or cost sharing specifically committed in the project budget must be included in the organized research base for computing the indirect (F&A) cost rate or reflected in any allocation of indirect costs. See also §§75.414, 75.203, and appendix I to this part.

(b) For all Federal awards, any shared costs or matching funds and all contributions, including cash and third party in-kind contributions, must be accepted as part of the non-Federal entity's cost sharing or matching when such contributions meet all of the following criteria:

(1) Are verifiable from the non-Federal entity's records;

(2) Are not included as contributions for any other Federal award;

(3) Are necessary and reasonable for accomplishment of project or program objectives;

(4) Are allowable under subpart E of this part;

(5) Are not paid by the Federal Government under another Federal award, except where the Federal statute authorizing a program specifically provides that Federal funds made available for such program can be applied to matching or cost sharing requirements of other Federal programs;

(6) Are provided for in the approved budget when required by the HHS awarding agency; and

(7) Conform to other provisions of this part, as applicable.

(c) Unrecovered indirect costs, including indirect costs on cost sharing or matching may be included as part of cost sharing or matching only with prior approval of the HHS awarding agency. Unrecovered indirect cost means the difference between the amount charged to the Federal award and the amount which could have been charged to the Federal award under the non-Federal entity's approved negotiated indirect cost rate.

(d) Values for non-Federal entity contributions of services and property must be established in accordance with the cost principles in subpart E. If an HHS awarding agency authorizes the non-Federal entity to donate buildings or land for construction/facilities acquisition projects or long-term use, the value of the donated property for cost sharing or matching must be the lesser of paragraphs (d)(1) or (2) of this section.

(1) The value of the remaining life of the property recorded in the non-Federal entity's accounting records at the time of donation.

(2) The current fair market value. However, when there is sufficient justification, the HHS awarding agency may approve the use of the current fair market value of the donated property, even if it exceeds the value described in paragraph (1) of this section at the time of donation.

(e) Volunteer services furnished by third-party professional and technical personnel, consultants, and other skilled and unskilled labor may be counted as cost sharing or matching if the service is an integral and necessary part of an approved project or program. Rates for third-party volunteer services must be consistent with those paid for similar work by the non-Federal entity. In those instances in which the required skills are not found in the non-Federal entity, rates must be consistent with those paid for similar work in the labor market in which the non-Federal entity competes for the kind of services involved. In either case, paid fringe benefits that are reasonable, necessary, allocable, and otherwise allowable may be included in the valuation.

(f) When a third-party organization furnishes the services of an employee, these services must be valued at the employee's regular rate of pay plus an amount of fringe benefits that is reasonable, necessary, allocable, and otherwise allowable, and indirect costs at either the third-party organization's approved federally negotiated indirect cost rate or, a rate in accordance with §75.414(f), provided these services employ the same skill(s) for which the employee is normally paid. Where donated services are treated as indirect costs, indirect cost rates will separate the value of the donated services so that reimbursement for the donated services will not be made.

(g) Donated property from third parties may include such items as equipment, office supplies, laboratory supplies, or workshop and classroom supplies. Value assessed to donated property included in

the cost sharing or matching share must not exceed the fair market value of the property at the time of the donation.

(h) The method used for determining cost sharing or matching for third-party-donated equipment, buildings and land for which title passes to the non-Federal entity may differ according to the purpose of the Federal award, if paragraph (h)(1) or (2) of this section applies.

(1) If the purpose of the Federal award is to assist the non-Federal entity in the acquisition of equipment, buildings or land, the aggregate value of the donated property may be claimed as cost sharing or matching.

(2) If the purpose of the Federal award is to support activities that require the use of equipment, buildings or land, normally only depreciation charges for equipment and buildings may be made. However, the fair market value of equipment or other capital assets and fair rental charges for land may be allowed, provided that the HHS awarding agency has approved the charges. See also §75.420.

(i) The value of donated property must be determined in accordance with the usual accounting policies of the non-Federal entity, with the following qualifications:

(1) The value of donated land and buildings must not exceed its fair market value at the time of donation to the non-Federal entity as established by an independent appraiser (e.g., certified real property appraiser or General Services Administration representative) and certified by a responsible official of the non-Federal entity as required by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, (42 U.S.C. 4601-4655) (Uniform Act) except as provided in the implementing regulations at 49 CFR part 24.

(2) The value of donated equipment must not exceed the fair market value of equipment of the same age and condition at the time of donation.

(3) The value of donated space must not exceed the fair rental value of comparable space as established by an independent appraisal of comparable space and facilities in a privately-owned building in the same locality.

(4) The value of loaned equipment must not exceed its fair rental value.

(j) For third-party in-kind contributions, the fair market value of goods and services must be documented and to the extent feasible supported by the same methods used internally by the non-Federal entity.

(k) For IHEs, see also OMB memorandum M-01-06, dated January 5, 2001, Clarification of OMB A-21 Treatment of Voluntary Uncommitted Cost Sharing and Tuition Remission Costs.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3016, Jan. 20, 2016]

§75.307 Program income.

(a) *General.* Non-Federal entities are encouraged to earn income to defray program costs where appropriate.

(b) *Cost of generating program income.* If authorized by Federal regulations or the Federal award, costs incidental to the generation of program income may be deducted from gross income to determine program income, provided these costs have not been charged to the Federal award.

(c) *Governmental revenues.* Taxes, special assessments, levies, fines, and other such revenues raised by a non-Federal entity are not program income unless the revenues are specifically identified in the Federal award or HHS awarding agency regulations as program income.

(1) The Patent and Trademark Laws Amendments, 34 U.S.C. 200-212, apply to inventions made under an award for performance of experimental, developmental, or research work.

(2) Unless the terms and conditions for the Federal award provide otherwise, recipients shall have no obligation to HHS with respect to program income earned from license fees and royalties for copyrighted material, patents, patent applications, trademarks, and inventions made under a Federal award. However, no scholarship, fellowship, training grant, or other funding agreement made primarily to a recipient for educational purposes will contain any provision giving the HHS awarding agency rights to inventions made by the recipient.

(d) *Property.* Proceeds from the sale of real property, equipment, or supplies, are not program income; such proceeds will be handled in accordance with the requirements of subpart D of this part, §§75.318, 75.320, and 75.321, or as specifically identified in Federal statutes, regulations, or the terms and conditions of the Federal award.

(e) *Use of program income.* If the HHS awarding agency does not specify in its regulations or the terms and conditions of the Federal award, or give prior approval for how program income is to be used, paragraph (e)(1) of this section must apply. For Federal awards made to IHEs and nonprofit research institutions, if the HHS awarding agency does not specify in its regulations or the terms and conditions of the Federal award how program income is to be used, paragraph (e)(2) of this section must apply unless the recipient is subject to conditions under §75.207 or §75.216. In specifying alternatives to paragraphs (e)(1) and (2) of this section, the HHS awarding agency may distinguish between income earned by the recipient and income earned by subrecipients and between the sources, kinds, or amounts of income. When the HHS awarding agency authorizes the approaches in paragraphs (e)(2) and (3) of this section, program income in excess of any amounts specified must also be deducted from expenditures.

(1) *Deduction.* Ordinarily program income must be deducted from total allowable costs to determine the net allowable costs. Program income must be used for current costs unless the HHS awarding agency authorizes otherwise. Program income that the non-Federal entity did not anticipate at the time of the Federal award must be used to reduce the Federal award and non-Federal entity contributions rather than to increase the funds committed to the project.

(2) *Addition.* With prior approval of the HHS awarding agency (except for IHEs and nonprofit research institutions, as described in paragraph (e) of this section), program income may be added to the Federal award by the Federal agency and the non-Federal entity. The program income must be used for the purposes and under the conditions of the Federal award.

(3) *Cost sharing or matching.* With prior approval of the HHS awarding agency, program income may be used to meet the cost sharing or matching requirement of the Federal award. The amount of the Federal award remains the same.

(f) *Income after the period of performance.* There are no Federal requirements governing the disposition of income earned after the end of the period of performance for the Federal award, unless the HHS awarding agency regulations or the terms and conditions of the award provide otherwise. The HHS awarding agency may negotiate agreements with recipients regarding appropriate uses of income earned after the period of performance as part of the grant closeout process. See also §75.381.

(g) Unless the Federal statute, regulations, or terms and conditions for the Federal award provide otherwise, the non-Federal entity has no obligation to the HHS awarding agency with respect to program income earned from license fees and royalties for copyrighted material, patents, patent applications,

trademarks, and inventions made under a Federal award to which 37 CFR part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms under Government Awards, Contracts and Cooperative Agreements" is applicable.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3016, Jan. 20, 2016]

§75.308 Revision of budget and program plans.

(a) The approved budget for the Federal award summarizes the financial aspects of the project or program as approved during the Federal award process. It may include either the Federal and non-Federal share (see §75.2 *Federal share*) or only the Federal share, depending upon HHS awarding agency requirements. It must be related to performance for program evaluation purposes whenever appropriate.

(b) Recipients are required to report deviations from budget or project scope or objective, and request prior approvals from HHS awarding agencies for budget and program plan revisions, in accordance with this section.

(c)(1) For non-construction Federal awards, recipients must request prior approvals from HHS awarding agencies for one or more of the following program or budget-related reasons:

(i) Change in the scope or the objective of the project or program (even if there is no associated budget revision requiring prior written approval).

(ii) Change in a key person specified in the application or the Federal award.

(iii) The disengagement from the project for more than three months, or a 25 percent reduction in time devoted to the project, by the approved project director or principal investigator.

(iv) The inclusion, unless waived by the HHS awarding agency, of costs that require prior approval in accordance with subpart E of this part, or appendix IX of this part, or 48 CFR part 31, as applicable.

(v) The transfer of funds budgeted for participant support costs as defined in §75.2 to other categories of expense.

(vi) Unless described in the application and funded in the approved Federal awards, the subawarding, transferring or contracting out of any work under a Federal award, including fixed amount subawards as described in §75.353. This provision does not apply to the acquisition of supplies, material, equipment or general support services.

(vii) Changes in the approved cost-sharing or matching provided by the non-Federal entity.

(viii) The need arises for additional Federal funds to complete the project.

(ix) The inclusion of research patient care costs in research awards made for the performance of research work.

(x) The provision of subawards by a pass-through entity on fixed amounts up to the Simplified Acquisition Threshold, provided that the subawards meet the requirements for fixed amount awards in §75.201. See §75.353.

(xi) The recipient wishes to dispose of, replace, or encumber title to real property, equipment, or intangible property that are acquired or improved with a Federal award. See §§75.318, 75.320, 75.322, and 75.323.

(2) No other prior approval requirements for specific items may be imposed unless an exception has been approved by OMB. See also §§75.102 and 75.407.

(d) Except for requirements listed in paragraph (c)(1) of this section, the HHS awarding agencies are authorized, at their option, to waive prior written approvals required by paragraph (c) this section. Such waivers may include authorizing recipients to do any one or more of the following:

(1) Incur project costs 90 calendar days before the HHS awarding agency makes the Federal award. Expenses more than 90 calendar days pre-award require prior approval of the HHS awarding agency. All costs incurred before the HHS awarding agency makes the Federal award are at the recipient's risk (*i.e.*, the HHS awarding agency is under no obligation to reimburse such costs if for any reason the recipient does not receive a Federal award or if the Federal award is less than anticipated and inadequate to cover such costs). See also §75.458.

(2) Initiate a one-time extension of the period of performance by up to 12 months unless one or more of the conditions outlined in paragraphs (d)(2)(i) through (iii) of this section apply. For one-time extensions, the recipient must notify the HHS awarding agency in writing with the supporting reasons and revised period of performance at least 10 calendar days before the end of the period of performance specified in the Federal award. This one-time extension may not be exercised merely for the purpose of using unobligated balances. Extensions require explicit prior HHS awarding agency approval when:

(i) The terms and conditions of the Federal award prohibit the extension.

(ii) The extension requires additional Federal funds.

(iii) The extension involves any change in the approved objectives or scope of the project.

(3) Carry forward unobligated balances to subsequent periods of performance.

(4) For Federal awards that support research, unless the HHS awarding agency provides otherwise in the Federal award or in the HHS awarding agency's regulations, the prior approval requirements described in paragraph (d) are automatically waived (*i.e.*, recipients need not obtain such prior approvals) unless one of the conditions included in paragraph (d)(2) applies.

(e) The HHS awarding agency may, at its option, restrict the transfer of funds among direct cost categories or programs, functions and activities for Federal awards in which the Federal share of the project exceeds the Simplified Acquisition Threshold and the cumulative amount of such transfers exceeds or is expected to exceed 10 percent of the total budget as last approved by the HHS awarding agency. The HHS awarding agency cannot permit a transfer that would cause any Federal appropriation to be used for purposes other than those consistent with the appropriation.

(f) All other changes to non-construction budgets, except for the changes described in paragraph (c) of this section, do not require prior approval (see also §75.407).

(g) For construction Federal awards, the recipient must request prior written approval promptly from the HHS awarding agency for budget revisions whenever paragraph (g)(1), (2), or (3) of this section applies.

(1) The revision results from changes in the scope or the objective of the project or program.

(2) The need arises for additional Federal funds to complete the project.

(3) A revision is desired which involves specific costs for which prior written approval requirements may be imposed consistent with applicable OMB cost principles listed in subpart E of this part.

(4) No other prior approval requirements for budget revisions may be imposed unless an exception has been approved by OMB.

(5) When an HHS awarding agency makes a Federal award that provides support for construction and non-construction work, the HHS awarding agency may require the recipient to obtain prior approval from the HHS awarding agency before making any fund or budget transfers between the two types of work supported.

(h) When requesting approval for budget revisions, the recipient must use the same format for budget information that was used in the application, unless the HHS awarding agency indicates a letter of request suffices.

(i) Within 30 calendar days from the date of receipt of the request for budget revisions, the HHS awarding agency must review the request and notify the recipient whether the budget revisions have been approved. If the revision is still under consideration at the end of 30 calendar days, the HHS awarding agency must inform the recipient in writing of the date when the recipient may expect the decision.

(j) All approvals granted in keeping with the provisions of this section shall not be valid unless they are in writing, and signed by at least one of the following HHS officials:

(1) The Head of the HHS awarding agency that made the award or subordinate official with proper delegated authority from the Head, including the Head of the Regional Office of the HHS awarding agency that made the award; or

(2) The responsible Grants Officer of the HHS awarding agency that made the award or an individual duly authorized by the Grants Officer.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3016, Jan. 20, 2016]

§75.309 Period of performance and availability of funds.

(a) A non-Federal entity may charge to the Federal award only allowable costs incurred during the period of performance (except as described in §75.461) and any costs incurred before the HHS awarding agency or pass-through entity made the Federal award that were authorized by the Federal awarding agency or pass-through entity. Funds available to pay allowable costs during the period of performance include both Federal funds awarded and carryover balances.

(b) A non-Federal entity must liquidate all obligations incurred under the award not later than 90 days after the end of the funding period (or as specified in a program regulation) to coincide with the submission of the final Federal Financial Report (FFR). This deadline may be extended with prior written approval from the HHS awarding agency.

§§75.310-75.315 [Reserved]

PROPERTY STANDARDS

§75.316 Purpose of property standards.

Sections 75.317 through 75.323 set forth uniform standards governing management and disposition of property furnished by HHS or whose cost was charged directly to a project supported by an HHS award. The HHS awarding agency may not impose additional requirements, unless specifically required to do so by Federal statute. The recipient may use its own property management standards and procedures provided they meet the provisions of these sections.

§75.317 Insurance coverage.

The non-Federal entity must, at a minimum, provide the equivalent insurance coverage for real property and equipment acquired or improved with Federal funds as provided to other property owned by the non-Federal entity. Federally-owned property need not be insured unless required by the terms and conditions of the Federal award.

§75.318 Real property.

(a) *Title.* Subject to the obligations and conditions set forth in this section, title to real property acquired or improved under a Federal award will vest upon acquisition in the non-Federal entity.

(b) *Use.* (1) Except as otherwise provided by Federal statutes or by the HHS awarding agency, real property will be used for the originally authorized purpose as long as needed for that purpose, during which time the non-Federal entity must not dispose of or encumber its title or other interests.

(2) The non-Federal entity shall obtain written approval from the HHS awarding agency for the use of real property in other federally-sponsored projects when the recipient determines that the property is no longer needed for the purpose of the original project. Use in other projects shall be limited to those under federally-sponsored projects (*i.e.*, awards) or programs that have purpose consistent with those authorized for support by the HHS awarding agency.

(c) *Disposition.* When real property is no longer needed as provided in subsection (b), the non-Federal entity must obtain disposition instructions from the HHS awarding agency or pass-through entity. The instructions must provide for one of the following alternatives:

(1) Retain title after compensating the HHS awarding agency. The amount paid to the HHS awarding agency will be computed by applying the HHS awarding agency's percentage of participation in the cost of the original purchase (and costs of any improvements) to the fair market value of the property. However, in those situations where the non-Federal entity is disposing of real property acquired or improved with a Federal award and acquiring replacement real property under the same Federal award, the net proceeds from the disposition may be used as an offset to the cost of the replacement property.

(2) Sell the property and compensate the HHS awarding agency. The amount due to the HHS awarding agency will be calculated by applying the HHS awarding agency's percentage of participation in the cost of the original purchase (and cost of any improvements) to the proceeds of the sale after deduction of any actual and reasonable selling and fixing-up expenses. If the Federal award has not been closed out, the net proceeds from sale may be offset against the original cost of the property. When the non-Federal entity is directed to sell property, sales procedures must be followed that provide for competition to the extent practicable and result in the highest possible return.

(3) Transfer title to the HHS awarding agency or to a third party designated/approved by the HHS awarding agency. The non-Federal entity is entitled to be paid an amount calculated by applying the non-Federal entity's percentage of participation in the purchase of the real property (and cost of any improvements) to the current fair market value of the property.

§75.319 Federally-owned and exempt property.

(a) Title to Federally-owned property remains vested in the Federal Government. The non-Federal entity must submit annually an inventory listing of Federally-owned property in its custody to the HHS awarding agency. Upon completion of the Federal award or when the property is no longer needed, the non-Federal entity must report the property to the HHS awarding agency for further Federal agency utilization.

(b) If the HHS awarding agency has no further need for the property, it must declare the property excess and report it for disposal to the appropriate Federal disposal authority, unless the HHS awarding agency has statutory authority to dispose of the property by alternative methods (*e.g.*, the authority provided by the Federal Technology Transfer Act (15 U.S.C. 3710 (i)) to donate research equipment to educational and non-profit organizations in accordance with Executive Order 12999). The HHS awarding agency must issue appropriate instructions to the non-Federal entity.

(c) Exempt Federally-owned property means property acquired under a Federal award where the HHS awarding agency has chosen to vest title to the property to the non-Federal entity without further obligation to the Federal Government, based upon the explicit terms and conditions of the Federal award. The HHS awarding agency may exercise this option when statutory authority exists. Absent statutory authority and specific terms and conditions of the Federal award, title to exempt Federally-owned property acquired under the Federal award remains with the Federal Government.

§75.320 Equipment.

See also §75.439.

(a) *Title.* Subject to the obligations and conditions set forth in this section, title to equipment acquired under a Federal award will vest upon acquisition in the non-Federal entity. Unless a statute specifically authorizes the Federal agency to vest title in the non-Federal entity without further obligation to the Federal Government, and the Federal agency elects to do so, the title must be a conditional title. Title must vest in the non-Federal entity subject to the following conditions:

(1) Use the equipment for the authorized purposes of the project during the period of performance, or until the property is no longer needed for the purposes of the project.

(2) Not encumber the property without approval of the HHS awarding agency or pass-through entity.

(3) Use and dispose of the property in accordance with paragraphs (b), (c) and (e) of this section.

(b) A state must use, manage and dispose of equipment acquired under a Federal award by the state in accordance with state laws and procedures. Other non-Federal entities must follow paragraphs (c) through (e) of this section.

(c) *Use.* (1) Equipment must be used by the non-Federal entity in the program or project for which it was acquired as long as needed, whether or not the project or program continues to be supported by the Federal award, and the non-Federal entity must not encumber the property without prior approval of the HHS awarding agency. When no longer needed for the original program or project, the equipment may be used in other activities supported by the HHS awarding agency, in the following order of priority:

(i) Activities under a Federal award from the HHS awarding agency which funded the original program or project, then

(ii) Activities under Federal awards from other HHS awarding agencies. This includes consolidated equipment for information technology systems.

(2) During the time that equipment is used on the project or program for which it was acquired, the non-Federal entity must also make the equipment available for use on other projects or programs currently or previously supported by the Federal Government, provided that such use will not interfere with the work on the projects or program for which it was originally acquired. First preference for other use must be given to other programs or projects supported by the HHS awarding agency that financed the equipment and second preference must be given to programs or projects under Federal awards from other Federal awarding agencies. Use for non-federally-funded programs or projects is also permissible. User fees should be considered if appropriate.

(3) Notwithstanding the encouragement in §75.307 to earn program income, the non-Federal entity must not use equipment acquired with the Federal award to provide services for a fee that is less than private companies charge for equivalent services unless specifically authorized by Federal statute for as long as the Federal Government retains an interest in the equipment.

(4) When acquiring replacement equipment, the non-Federal entity may use the equipment to be replaced as a trade-in or sell the property and use the proceeds to offset the cost of the replacement property subject to the approval of the HHS awarding agency.

(d) *Management requirements.* Procedures for managing equipment (including replacement equipment), whether acquired in whole or in part under a Federal award, until disposition takes place will, as a minimum, meet the following requirements:

(1) Property records must be maintained that include a description of the property, a serial number or other identification number, the source of funding for the property (including the FAIN), who holds title, the acquisition date, and cost of the property, percentage of Federal participation in the project costs for the Federal award under which the property was acquired, the location, use and condition of the property, and any ultimate disposition data including the date of disposal and sale price of the property.

(2) A physical inventory of the property must be taken and the results reconciled with the property records at least once every two years.

(3) A control system must be developed to ensure adequate safeguards to prevent loss, damage, or theft of the property. Any loss, damage, or theft must be investigated.

(4) Adequate maintenance procedures must be developed to keep the property in good condition.

(5) If the non-Federal entity is authorized or required to sell the property, proper sales procedures must be established to ensure the highest possible return.

(e) *Disposition.* When original or replacement equipment acquired under a Federal award is no longer needed for the original project or program or for other activities currently or previously supported by a HHS awarding agency, except as otherwise provided in Federal statutes, regulations, or HHS awarding agency disposition instructions, the non-Federal entity must request disposition instructions from the HHS awarding agency if required by the terms and conditions of the Federal award. Disposition of the equipment will be made as follows, in accordance with HHS awarding agency disposition instructions:

(1) Items of equipment with a current per unit fair market value of \$5,000 or less may be retained, sold or otherwise disposed of with no further obligation to the HHS awarding agency.

(2) Except as provided in §75.319(b), or if the HHS awarding agency fails to provide requested disposition instructions within 120 days, items of equipment with a current per-unit fair-market value in excess of \$5,000 may be retained by the non-Federal entity or sold. The HHS awarding agency is entitled

to an amount calculated by multiplying the current market value or proceeds from sale by the HHS awarding agency's percentage of participation in the cost of the original purchase. If the equipment is sold, the HHS awarding agency may permit the non-Federal entity to deduct and retain from the Federal share \$500 or ten percent of the proceeds, whichever is less, for its selling and handling expenses.

(3) The non-Federal entity may transfer title to the property to the Federal Government or to an eligible third party provided that, in such cases, the non-Federal entity must be entitled to compensation for its attributable percentage of the current fair market value of the property.

(4) In cases where a non-Federal entity fails to take appropriate disposition actions, the HHS awarding agency may direct the non-Federal entity to take disposition actions.

§75.321 Supplies.

See also §75.453.

(a) Title to supplies will vest in the non-Federal entity upon acquisition. If there is a residual inventory of unused supplies exceeding \$5,000 in total aggregate value upon termination or completion of the project or program and the supplies are not needed for any other Federal award, the non-Federal entity must retain the supplies for use on other activities or sell them, but must, in either case, compensate the Federal Government for its share. The amount of compensation must be computed in the same manner as for equipment. See §75.320(e)(2) for the calculation methodology.

(b) As long as the Federal Government retains an interest in the supplies, the non-Federal entity must not use supplies acquired under a Federal award to provide services to other organizations for a fee that is less than private companies charge for equivalent services, unless specifically authorized by Federal statute.

§75.322 Intangible property and copyrights.

(a) Title to intangible property (see §75.2 *Intangible property*) acquired under a Federal award vests upon acquisition in the non-Federal entity. The non-Federal entity must use that property for the originally-authorized purpose, and must not encumber the property without approval of the HHS awarding agency. When no longer needed for the originally authorized purpose, disposition of the intangible property must occur in accordance with the provisions in §75.320(e).

(b) The non-Federal entity may copyright any work that is subject to copyright and was developed, or for which ownership was acquired, under a Federal award. The HHS awarding agency reserves a royalty-free, nonexclusive and irrevocable right to reproduce, publish, or otherwise use the work for Federal purposes, and to authorize others to do so.

(c) The non-Federal entity is subject to applicable regulations governing patents and inventions, including government-wide regulations issued by the Department of Commerce at 37 CFR part 401.

(d) The Federal Government has the right to:

(1) Obtain, reproduce, publish, or otherwise use the data produced under a Federal award; and

(2) Authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes

(e) *Freedom of Information Act (FOIA)*. (1) In response to a Freedom of Information Act (FOIA) request for research data relating to published research findings produced under a Federal award that were used by the Federal Government in developing an agency action that has the force and effect of

law, the HHS awarding agency must request, and the non-Federal entity must provide, within a reasonable time, the research data so that they can be made available to the public through the procedures established under the FOIA. If the HHS awarding agency obtains the research data solely in response to a FOIA request, the HHS awarding agency may charge the requester a reasonable fee equaling the full incremental cost of obtaining the research data. This fee should reflect costs incurred by the Federal agency and the non-Federal entity. This fee is in addition to any fees the HHS awarding agency may assess under the FOIA (5 U.S.C. 552(a)(4)(A)).

(2) Published research findings means when:

(i) Research findings are published in a peer-reviewed scientific or technical journal; or

(ii) A Federal agency publicly and officially cites the research findings in support of an agency action that has the force and effect of law. "Used by the Federal Government in developing an agency action that has the force and effect of law" is defined as when an agency publicly and officially cites the research findings in support of an agency action that has the force and effect of law.

(3) Research data means the recorded factual material commonly accepted in the scientific community as necessary to validate research findings, but not any of the following: Preliminary analyses, drafts of scientific papers, plans for future research, peer reviews, or communications with colleagues. This "recorded" material excludes physical objects (e.g., laboratory samples). Research data also do not include:

(i) Trade secrets, commercial information, materials necessary to be held confidential by a researcher until they are published, or similar information which is protected under law; and

(ii) Personnel and medical information and similar information the disclosure of which would constitute a clearly unwarranted invasion of personal privacy, such as information that could be used to identify a particular person in a research study.

(f) The requirements set forth in paragraph (e)(1) of this section do not apply to commercial organizations

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3016, Jan. 20, 2016]

§75.323 Property trust relationship.

Real property, equipment, and intangible property, that are acquired or improved with a Federal award must be held in trust by the non-Federal entity as trustee for the beneficiaries of the project or program under which the property was acquired or improved. The HHS awarding agency may require the non-Federal entity to record liens or other appropriate notices of record to indicate that personal or real property has been acquired or improved with a Federal award and that use and disposition conditions apply to the property.

§§75.324-75.325 [Reserved]

PROCUREMENT STANDARDS

§75.326 Procurements by states.

When procuring property and services under a Federal award, a state must follow the same policies and procedures it uses for procurements from its non-Federal funds. The state will comply with §75.331

and ensure that every purchase order or other contract includes any clauses required by §75.335. All other non-Federal entities, including subrecipients of a state, will follow §§75.327 through 75.335.

§75.327 General procurement standards.

(a) The non-Federal entity must use its own documented procurement procedures which reflect applicable State, local, and tribal laws and regulations, provided that the procurements conform to applicable Federal law and the standards identified in this part.

(b) Non-Federal entities must maintain oversight to ensure that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders.

(c)(1) The non-Federal entity must maintain written standards of conduct covering conflicts of interest and governing the actions of its employees engaged in the selection, award and administration of contracts. No employee, officer, or agent may participate in the selection, award, or administration of a contract supported by a Federal award if he or she has a real or apparent conflict of interest. Such a conflict of interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. The officers, employees, and agents of the non-Federal entity may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, non-Federal entities may set standards for situations in which the financial interest is not substantial or the gift is an unsolicited item of nominal value. The standards of conduct must provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the non-Federal entity.

(2) If the non-Federal entity has a parent, affiliate, or subsidiary organization that is not a state, local government, or Indian tribe, the non-Federal entity must also maintain written standards of conduct covering organizational conflicts of interest. Organizational conflicts of interest means that because of relationships with a parent company, affiliate, or subsidiary organization, the non-Federal entity is unable or appears to be unable to be impartial in conducting a procurement action involving a related organization.

(d) The non-Federal entity's procedures must avoid acquisition of unnecessary or duplicative items. Consideration should be given to consolidating or breaking out procurements to obtain a more economical purchase. Where appropriate, an analysis will be made of lease versus purchase alternatives, and any other appropriate analysis to determine the most economical approach.

(e) To foster greater economy and efficiency, and in accordance with efforts to promote cost-effective use of shared services across the Federal Government, the non-Federal entity is encouraged to enter into state and local intergovernmental agreements or inter-entity agreements where appropriate for procurement or use of common or shared goods and services.

(f) The non-Federal entity is encouraged to use Federal excess and surplus property in lieu of purchasing new equipment and property whenever such use is feasible and reduces project costs.

(g) The non-Federal entity is encouraged to use value engineering clauses in contracts for construction projects of sufficient size to offer reasonable opportunities for cost reductions. Value engineering is a systematic and creative analysis of each contract item or task to ensure that its essential function is provided at the overall lower cost.

(h) The non-Federal entity must award contracts only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement. Consideration

will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources. See also §75.213.

(i) The non-Federal entity must maintain records sufficient to detail the history of procurement. These records will include, but are not necessarily limited to the following: rationale for the method of procurement, selection of contract type, contractor selection or rejection, and the basis for the contract price.

(j)(1) The non-Federal entity may use a time and materials type contract only after a determination that no other contract is suitable and if the contract includes a ceiling price that the contractor exceeds at its own risk. Time and materials type contract means a contract whose cost to a non-Federal entity is the sum of:

(i) The actual cost of materials; and

(ii) Direct labor hours charged at fixed hourly rates that reflect wages, general and administrative expenses, and profit.

(2) Since this formula generates an open-ended contract price, a time-and-materials contract provides no positive profit incentive to the contractor for cost control or labor efficiency. Therefore, each contract must set a ceiling price that the contractor exceeds at its own risk. Further, the non-Federal entity awarding such a contract must assert a high degree of oversight in order to obtain reasonable assurance that the contractor is using efficient methods and effective cost controls.

(k) The non-Federal entity alone must be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements. These issues include, but are not limited to, source evaluation, protests, disputes, and claims. These standards do not relieve the non-Federal entity of any contractual responsibilities under its contracts. The HHS awarding agency will not substitute its judgment for that of the non-Federal entity unless the matter is primarily a Federal concern. Violations of law will be referred to the local, tribal, state, or Federal authority having proper jurisdiction.

(l) The type of procuring instruments used must be determined by the recipient but shall be appropriate for the particular procurement and for promoting the best interest of the program or project involved.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3016, Jan. 20, 2016]

§75.328 Competition.

(a) All procurement transactions must be conducted in a manner providing full and open competition consistent with the standards of this section. In order to ensure objective contractor performance and eliminate unfair competitive advantage, contractors that develop or draft specifications, requirements, statements of work, or invitations for bids or requests for proposals must be excluded from competing for such procurements. Some of the situations considered to be restrictive of competition include but are not limited to:

(1) Placing unreasonable requirements on firms in order for them to qualify to do business;

(2) Requiring unnecessary experience and excessive bonding;

(3) Noncompetitive pricing practices between firms or between affiliated companies;

(4) Noncompetitive contracts to consultants that are on retainer contracts;

(5) Organizational conflicts of interest;

(6) Specifying only a “brand name” product instead of allowing “an equal” product to be offered and describing the performance or other relevant requirements of the procurement; and

(7) Any arbitrary action in the procurement process.

(b) The non-Federal entity must conduct procurements in a manner that prohibits the use of statutorily or administratively imposed state, local, or tribal geographical preferences in the evaluation of bids or proposals, except in those cases where applicable Federal statutes expressly mandate or encourage geographic preference. Nothing in this section preempts state licensing laws. When contracting for architectural and engineering (A/E) services, geographic location may be a selection criterion provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.

(c) The non-Federal entity must have written procedures for procurement transactions. These procedures must ensure that all solicitations:

(1) Incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Such description must not, in competitive procurements, contain features which unduly restrict competition. The description may include a statement of the qualitative nature of the material, product or service to be procured and, when necessary, must set forth those minimum essential characteristics and standards to which it must conform if it is to satisfy its intended use. Detailed product specifications should be avoided if at all possible. When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a “brand name or equivalent” description may be used as a means to define the performance or other salient requirements of procurement. The specific features of the named brand which must be met by offers must be clearly stated; and

(2) Identify all requirements which the offerors must fulfill and all other factors to be used in evaluating bids or proposals.

(d) The non-Federal entity must ensure that all prequalified lists of persons, firms, or products which are used in acquiring goods and services are current and include enough qualified sources to ensure maximum open and free competition. Also, the non-Federal entity must not preclude potential bidders from qualifying during the solicitation period.

§75.329 Procurement procedures.

The non-Federal entity must use one of the following methods of procurement.

(a) *Procurement by micro-purchases.* Procurement by micro-purchase is the acquisition of supplies or services, the aggregate dollar amount of which does not exceed the micro-purchase threshold (See *micro-purchase*). To the extent practicable, the non-Federal entity must distribute micro-purchases equitably among qualified suppliers. Micro-purchases may be awarded without soliciting competitive quotations if the non-Federal entity considers the price to be reasonable.

(b) *Procurement by small purchase procedures.* Small purchase procedures are those relatively simple and informal procurement methods for securing services, supplies, or other property that do not cost more than the Simplified Acquisition Threshold. If small purchase procedures are used, price or rate quotations must be obtained from an adequate number of qualified sources.

(c) *Procurement by sealed bids (formal advertising)*. Bids are publicly solicited and a firm fixed price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming with all the material terms and conditions of the invitation for bids, is the lowest in price. The sealed bid method is the preferred method for procuring construction, if the conditions in paragraph (c)(1) of this section apply.

(1) In order for sealed bidding to be feasible, the following conditions should be present:

- (i) A complete, adequate, and realistic specification or purchase description is available;
- (ii) Two or more responsible bidders are willing and able to compete effectively for the business; and
- (iii) The procurement lends itself to a firm fixed price contract and the selection of the successful bidder can be made principally on the basis of price.

(2) If sealed bids are used, the following requirements apply:

(i) Bids must be solicited from an adequate number of known suppliers, providing them sufficient response time prior to the date set for opening the bids, for local, and tribal governments, the invitation for bids must be publicly advertised;

(ii) The invitation for bids, which will include any specifications and pertinent attachments, must define the items or services in order for the bidder to properly respond;

(iii) All bids will be opened at the time and place prescribed in the invitation for bids, for local, and tribal governments, the bids must be opened publicly;

(iv) A firm fixed price contract award will be made in writing to the lowest responsive and responsible bidder. Where specified in bidding documents, factors such as discounts, transportation cost, and life cycle costs must be considered in determining which bid is lowest. Payment discounts will only be used to determine the low bid when prior experience indicates that such discounts are usually taken advantage of; and

(v) Any or all bids may be rejected if there is a sound documented reason.

(d) *Procurement by competitive proposals*. The technique of competitive proposals is normally conducted with more than one source submitting an offer, and either a fixed price or cost-reimbursement type contract is awarded. It is generally used when conditions are not appropriate for the use of sealed bids. If this method is used, the following requirements apply:

(1) Requests for proposals must be publicized and identify all evaluation factors and their relative importance. Any response to publicized requests for proposals must be considered to the maximum extent practical;

(2) Proposals must be solicited from an adequate number of qualified sources;

(3) The non-Federal entity must have a written method for conducting technical evaluations of the proposals received and for selecting recipients;

(4) Contracts must be awarded to the responsible firm whose proposal is most advantageous to the program, with price and other factors considered; and

(5) The non-Federal entity may use competitive proposal procedures for qualifications-based procurement of architectural/engineering (A/E) professional services whereby competitors' qualifications are evaluated and the most qualified competitor is selected, subject to negotiation of fair and reasonable compensation. The method, where price is not used as a selection factor, can only be used in procurement of A/E professional services. It cannot be used to purchase other types of services though A/E firms are a potential source to perform the proposed effort.

(e) [Reserved]

(f) *Procurement by noncompetitive proposals.* Procurement by noncompetitive proposals is procurement through solicitation of a proposal from only one source and may be used only when one or more of the following circumstances apply:

(1) The item is available only from a single source;

(2) The public exigency or emergency for the requirement will not permit a delay resulting from competitive solicitation;

(3) The HHS awarding agency or pass-through entity expressly authorizes noncompetitive proposals in response to a written request from the non-Federal entity; or

(4) After solicitation of a number of sources, competition is determined inadequate.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3016, Jan. 20, 2016]

§75.330 Contracting with small and minority businesses, women's business enterprises, and labor surplus area firms.

(a) The non-Federal entity must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

(b) Affirmative steps must include:

(1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

(3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;

(4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;

(5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and

(6) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (b)(1) through (5) of this section.

§75.331 Procurement of recovered materials.

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

§75.332 Contract cost and price.

(a) The non-Federal entity must perform a cost or price analysis in connection with every procurement action in excess of the Simplified Acquisition Threshold including contract modifications. The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, the non-Federal entity must make independent estimates before receiving bids or proposals.

(b) The non-Federal entity must negotiate profit as a separate element of the price for each contract in which there is no price competition and in all cases where cost analysis is performed. To establish a fair and reasonable profit, consideration must be given to the complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.

(c) Costs or prices based on estimated costs for contracts under the Federal award are allowable only to the extent that costs incurred or cost estimates included in negotiated prices would be allowable for the non-Federal entity under subpart E of this part. The non-Federal entity may reference its own cost principles that comply with the Federal cost principles.

(d) The cost plus a percentage of cost and percentage of construction cost methods of contracting must not be used.

§75.333 HHS awarding agency or pass-through entity review.

(a) The non-Federal entity must make available, upon request of the HHS awarding agency or pass-through entity, technical specifications on proposed procurements where the HHS awarding agency or pass-through entity believes such review is needed to ensure that the item or service specified is the one being proposed for acquisition. This review generally will take place prior to the time the specification is incorporated into a solicitation document. However, if the non-Federal entity desires to have the review accomplished after a solicitation has been developed, the HHS awarding agency or pass-through entity may still review the specifications, with such review usually limited to the technical aspects of the proposed purchase.

(b) The non-Federal entity must make available upon request, for the HHS awarding agency or pass-through entity pre-procurement review, procurement documents, such as requests for proposals or invitations for bids, or independent cost estimates, when:

(1) The non-Federal entity's procurement procedures or operation fails to comply with the procurement standards in this part;

(2) The procurement is expected to exceed the Simplified Acquisition Threshold and is to be awarded without competition or only one bid or offer is received in response to a solicitation;

(3) The procurement, which is expected to exceed the Simplified Acquisition Threshold, specifies a “brand name” product;

(4) The proposed contract is more than the Simplified Acquisition Threshold and is to be awarded to other than the apparent low bidder under a sealed bid procurement; or

(5) A proposed contract modification changes the scope of a contract or increases the contract amount by more than the Simplified Acquisition Threshold.

(c) The non-Federal entity is exempt from the pre-procurement review in paragraph (b) of this section if the HHS awarding agency or pass-through entity determines that its procurement systems comply with the standards of this part.

(1) The non-Federal entity may request that its procurement system be reviewed by the HHS awarding agency or pass-through entity to determine whether its system meets these standards in order for its system to be certified. Generally, these reviews must occur where there is continuous high-dollar funding, and third party contracts are awarded on a regular basis;

(2) The non-Federal entity may self-certify its procurement system. Such self-certification must not limit the HHS awarding agency's right to survey the system. Under a self-certification procedure, the HHS awarding agency may rely on written assurances from the non-Federal entity that it is complying with these standards. The non-Federal entity must cite specific policies, procedures, regulations, or standards as being in compliance with these requirements and have its system available for review.

§75.334 Bonding requirements.

For construction or facility improvement contracts or subcontracts exceeding the Simplified Acquisition Threshold, the HHS awarding agency or pass-through entity may accept the bonding policy and requirements of the non-Federal entity provided that the HHS awarding agency or pass-through entity has made a determination that the Federal interest is adequately protected. If such a determination has not been made, the minimum requirements must be as follows:

(a) A bid guarantee from each bidder equivalent to five percent of the bid price. The “bid guarantee” must consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of the bid, execute such contractual documents as may be required within the time specified.

(b) A performance bond on the part of the contractor for 100 percent of the contract price. A “performance bond” is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.

(c) A payment bond on the part of the contractor for 100 percent of the contract price. A “payment bond” is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

(d) Where bonds are required in the situations described herein, the bonds shall be obtained from companies holding certificates of authority as acceptable sureties pursuant to 31 CFR part 223.

§75.335 Contract provisions.

The non-Federal entity's contracts must contain the applicable provisions described in appendix II to this part.

§§75.336-75.340 [Reserved]

PERFORMANCE AND FINANCIAL MONITORING AND REPORTING

§75.341 Financial reporting.

Unless otherwise approved by OMB, the HHS awarding agency may solicit only the standard, OMB-approved government-wide data elements for collection of financial information (at time of publication the Federal Financial Report or such future collections as may be approved by OMB and listed on the OMB Web site). This information must be collected with the frequency required by the terms and conditions of the Federal award, but no less frequently than annually nor more frequently than quarterly except in unusual circumstances, for example where more frequent reporting is necessary for the effective monitoring of the Federal award or could significantly affect program outcomes, and preferably in coordination with performance reporting.

§75.342 Monitoring and reporting program performance.

(a) *Monitoring by the non-Federal entity.* The non-Federal entity is responsible for oversight of the operations of the Federal award supported activities. The non-Federal entity must monitor its activities under Federal awards to assure compliance with applicable Federal requirements and performance expectations are being achieved. Monitoring by the non-Federal entity must cover each program, function or activity. See also §75.352.

(b) *Non-construction performance reports.* The HHS awarding agency must use standard, OMB-approved data elements for collection of performance information (including performance progress reports, Research Performance Progress Report, or such future collections as may be approved by OMB and listed on the OMB Web site).

(1) The non-Federal entity must submit performance reports at the interval required by the HHS awarding agency or pass-through entity to best inform improvements in program outcomes and productivity. Intervals must be no less frequent than annually nor more frequent than quarterly except in unusual circumstances, for example where more frequent reporting is necessary for the effective monitoring of the Federal award or could significantly affect program outcomes. Annual reports must be due 90 calendar days after the reporting period; quarterly or semiannual reports must be due 30 calendar days after the reporting period. Alternatively, the HHS awarding agency or pass-through entity may require annual reports before the anniversary dates of multiple year Federal awards. The final performance report will be due 90 calendar days after the period of performance end date. If a justified request is submitted by a non-Federal entity, the HHS awarding agency may extend the due date for any performance report.

(2) The non-Federal entity must submit performance reports using OMB-approved government-wide standard information collections when providing performance information. As appropriate in accordance with the above-mentioned information collections, these reports will contain, for each Federal award, brief information on the following unless other collections are approved by OMB:

(i) A comparison of actual accomplishments to the objectives of the Federal award established for the period. Where the accomplishments of the Federal award can be quantified, a computation of the cost (for example, related to units of accomplishment) may be required if that information will be useful. Where performance trend data and analysis would be informative to the HHS awarding agency program, the HHS awarding agency should include this as a performance reporting requirement.

(ii) The reasons why established goals were not met, if appropriate.

(iii) Additional pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit costs.

(c) *Construction performance reports.* For the most part, onsite technical inspections and certified percentage of completion data are relied on heavily by HHS awarding agencies and pass-through entities to monitor progress under Federal awards and subawards for construction. The HHS awarding agency may require additional performance reports only when considered necessary.

(d) *Significant developments.* Events may occur between the scheduled performance reporting dates that have significant impact upon the supported activity. In such cases, the non-Federal entity must inform the HHS awarding agency or pass-through entity as soon as the following types of conditions become known:

(1) Problems, delays, or adverse conditions which will materially impair the ability to meet the objective of the Federal award. This disclosure must include a statement of the action taken, or contemplated, and any assistance needed to resolve the situation.

(2) Favorable developments which enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more or different beneficial results than originally planned.

(e) The HHS awarding agency may make site visits as warranted by program needs.

(f) The HHS awarding agency may waive any performance report required by this part if not needed.

§75.343 Reporting on real property.

The HHS awarding agency or pass-through entity must require a non-Federal entity to submit reports at least annually on the status of real property in which the Federal Government retains an interest, unless the Federal interest in the real property extends 15 years or longer. In those instances where the Federal interest attached is for a period of 15 years or more, the HHS awarding agency or pass-through entity, at its option, may require the non-Federal entity to report at various multi-year frequencies (*e.g.*, every two years or every three years, not to exceed a five-year reporting period; or an HHS awarding agency or pass-through entity may require annual reporting for the first three years of a Federal award and thereafter require reporting every five years).

§§75.344-75.350 [Reserved]

SUBRECIPIENT MONITORING AND MANAGEMENT

§75.351 Subrecipient and contractor determinations.

The non-Federal entity may concurrently receive Federal awards as a recipient, a subrecipient, and a contractor, depending on the substance of its agreements with HHS awarding agencies and pass-through entities. Therefore, a pass-through entity must make case-by-case determinations whether each agreement it makes for the disbursement of Federal program funds casts the party receiving the funds in the role of a subrecipient or a contractor. The HHS awarding agency may supply and require recipients to comply with additional guidance to support these determinations provided such guidance does not conflict with this section.

(a) *Subrecipients.* A subaward is for the purpose of carrying out a portion of a Federal award and creates a Federal assistance relationship with the subrecipient. See §75.2 *Subaward*. Characteristics which support the classification of the non-Federal entity as a subrecipient include when the non-Federal entity:

- (1) Determines who is eligible to receive what Federal assistance;
- (2) Has its performance measured in relation to whether objectives of a Federal program were met;
- (3) Has responsibility for programmatic decision making;
- (4) Is responsible for adherence to applicable Federal program requirements specified in the Federal award; and
- (5) In accordance with its agreement, uses the Federal funds to carry out a program for a public purpose specified in authorizing statute, as opposed to providing goods or services for the benefit of the pass-through entity.

(b) *Contractors.* A contract is for the purpose of obtaining goods and services for the non-Federal entity's own use and creates a procurement relationship with the contractor. See §75.2 *Contract*. Characteristics indicative of a procurement relationship between the non-Federal entity and a contractor are when the contractor:

- (1) Provides the goods and services within normal business operations;
- (2) Provides similar goods or services to many different purchasers;
- (3) Normally operates in a competitive environment;
- (4) Provides goods or services that are ancillary to the operation of the Federal program; and
- (5) Is not subject to compliance requirements of the Federal program as a result of the agreement, though similar requirements may apply for other reasons.

(c) *Use of judgment in making determination.* In determining whether an agreement between a pass-through entity and another non-Federal entity casts the latter as a subrecipient or a contractor, the substance of the relationship is more important than the form of the agreement. All of the characteristics listed above may not be present in all cases, and the pass-through entity must use judgment in classifying each agreement as a subaward or a procurement contract.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3016, Jan. 20, 2016]

§75.352 Requirements for pass-through entities.

All pass-through entities must:

(a) Ensure that every subaward is clearly identified to the subrecipient as a subaward and includes the following information at the time of the subaward and if any of these data elements change, include the changes in subsequent subaward modification. When some of this information is not available, the pass-through entity must provide the best information available to describe the Federal award and subaward. Required information includes:

- (1) Federal Award Identification.
 - (i) Subrecipient name (which must match the name associated with its unique entity identifier);
 - (ii) Subrecipient's unique entity identifier;

(iii) Federal Award Identification Number (FAIN);

(iv) Federal Award Date (see §75.2 *Federal award date*) of award to the recipient by the HHS awarding agency;

(v) Subaward Period of Performance Start and End Date;

(vi) Amount of Federal Funds Obligated by this action by the pass-through entity to the subrecipient;

(vii) Total Amount of Federal Funds Obligated to the subrecipient by the pass-through entity including the current obligation;

(viii) Total Amount of the Federal Award committed to the subrecipient by the pass-through entity;

(ix) Federal award project description, as required to be responsive to the Federal Funding Accountability and Transparency Act (FFATA);

(x) Name of HHS awarding agency, pass-through entity, and contract information for awarding official of the pass-through entity;

(xi) CFDA Number and Name; the pass-through entity must identify the dollar amount made available under each Federal award and the CFDA number at time of disbursement;

(xii) Identification of whether the award is R&D; and

(xiii) Indirect cost rate for the Federal award (including if the de minimis rate is charged per §75.414).

(2) All requirements imposed by the pass-through entity on the subrecipient so that the Federal award is used in accordance with Federal statutes, regulations and the terms and conditions of the Federal award;

(3) Any additional requirements that the pass-through entity imposes on the subrecipient in order for the pass-through entity to meet its own responsibility to the HHS awarding agency including identification of any required financial and performance reports;

(4) An approved federally recognized indirect cost rate negotiated between the subrecipient and the Federal Government or, if no such rate exists, either a rate negotiated between the pass-through entity and the subrecipient (in compliance with this part), or a de minimis indirect cost rate as defined in §75.414(f);

(5) A requirement that the subrecipient permit the pass-through entity and auditors to have access to the subrecipient's records and financial statements as necessary for the pass-through entity to meet the requirements of this part; and

(6) Appropriate terms and conditions concerning closeout of the subaward.

(b) Evaluate each subrecipient's risk of noncompliance with Federal statutes, regulations, and the terms and conditions of the subaward for purposes of determining the appropriate subrecipient monitoring described in paragraphs (d) and (e) of this section, which may include consideration of such factors as:

(1) The subrecipient's prior experience with the same or similar subawards;

(2) The results of previous audits including whether or not the subrecipient receives a Single Audit in accordance with subpart F, and the extent to which the same or similar subaward has been audited as a major program;

(3) Whether the subrecipient has new personnel or new or substantially changed systems; and

(4) The extent and results of HHS awarding agency monitoring (e.g., if the subrecipient also receives Federal awards directly from a HHS awarding agency).

(c) Consider imposing specific subaward conditions upon a subrecipient if appropriate as described in §75.207.

(d) Monitor the activities of the subrecipient as necessary to ensure that the subaward is used for authorized purposes, in compliance with Federal statutes, regulations, and the terms and conditions of the subaward; and that subaward performance goals are achieved. Pass-through entity monitoring of the subrecipient must include:

(1) Reviewing financial and performance reports required by the pass-through entity.

(2) Following-up and ensuring that the subrecipient takes timely and appropriate action on all deficiencies pertaining to the Federal award provided to the subrecipient from the pass-through entity detected through audits, on-site reviews, and other means.

(3) Issuing a management decision for audit findings pertaining to the Federal award provided to the subrecipient from the pass-through entity as required by §75.521.

(e) Depending upon the pass-through entity's assessment of risk posed by the subrecipient (as described in paragraph (b) of this section), the following monitoring tools may be useful for the pass-through entity to ensure proper accountability and compliance with program requirements and achievement of performance goals:

(1) Providing subrecipients with training and technical assistance on program-related matters; and

(2) Performing on-site reviews of the subrecipient's program operations;

(3) Arranging for agreed-upon-procedures engagements as described in §75.425.

(f) Verify that every subrecipient is audited as required by subpart F of this part when it is expected that the subrecipient's Federal awards expended during the respective fiscal year equaled or exceeded the threshold set forth in §75.501.

(g) Consider whether the results of the subrecipient's audits, on-site reviews, or other monitoring indicate conditions that necessitate adjustments to the pass-through entity's own records.

(h) Consider taking enforcement action against noncompliant subrecipients as described in §75.371 and in program regulations.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3016, Jan. 20, 2016]

§75.353 Fixed amount subawards.

With prior written approval from the HHS awarding agency, a pass-through entity may provide subawards based on fixed amounts up to the Simplified Acquisition Threshold, provided that the subawards meet the requirements for fixed amount awards in §75.201.

§§75.354-75.360 [Reserved]

RECORD RETENTION AND ACCESS

§75.361 Retention requirements for records.

Financial records, supporting documents, statistical records, and all other non-Federal entity records pertinent to a Federal award must be retained for a period of three years from the date of submission of the final expenditure report or, for Federal awards that are renewed quarterly or annually, from the date of the submission of the quarterly or annual financial report, respectively, as reported to the HHS awarding agency or pass-through entity in the case of a subrecipient. HHS awarding agencies and pass-through entities must not impose any other record retention requirements upon non-Federal entities. The only exceptions are the following:

(a) If any litigation, claim, or audit is started before the expiration of the 3-year period, the records must be retained until all litigation, claims, or audit findings involving the records have been resolved and final action taken.

(b) When the non-Federal entity is notified in writing by the HHS awarding agency, cognizant agency for audit, oversight agency for audit, cognizant agency for indirect costs, or pass-through entity to extend the retention period.

(c) Records for real property and equipment acquired with Federal funds must be retained for 3 years after final disposition.

(d) When records are transferred to or maintained by the HHS awarding agency or pass-through entity, the 3-year retention requirement is not applicable to the non-Federal entity.

(e) Records for program income transactions after the period of performance. In some cases, recipients must report program income after the period of performance. Where there is such a requirement, the retention period for the records pertaining to the earning of the program income starts from the end of the non-Federal entity's fiscal year in which the program income is earned.

(f) Indirect cost rate proposals and cost allocations plans. This paragraph applies to the following types of documents and their supporting records: Indirect cost rate computations or proposals, cost allocation plans, and any similar accounting computations of the rate at which a particular group of costs is chargeable (such as computer usage chargeback rates or composite fringe benefit rates).

(1) *If submitted for negotiation.* If the proposal, plan, or other computation is required to be submitted to the Federal Government (or to the pass-through entity) to form the basis for negotiation of the rate, then the 3-year retention period for its supporting records starts from the date of such submission.

(2) *If not submitted for negotiation.* If the proposal, plan, or other computation is not required to be submitted to the Federal Government (or to the pass-through entity) for negotiation purposes, then the 3-year retention period for the proposal, plan, or computation and its supporting records starts from the end of the fiscal year (or other accounting period) covered by the proposal, plan, or other computation.

§75.362 Requests for transfer or records.

The HHS awarding agency must request transfer of certain records to its custody from the non-Federal entity when it determines that the records possess long-term retention value. However, in order to avoid duplicate recordkeeping, the HHS awarding agency may make arrangements for the non-Federal entity to retain any records that are continuously needed for joint use.

§75.363 Methods for collection, transmission and storage of information.

In accordance with the May 2013 Executive Order on Making Open and Machine readable the New Default for Government Information, the HHS awarding agency and the non-Federal entity should, whenever practicable, collect, transmit, and store Federal award-related information in open and machine readable formats rather than in closed formats or on paper.

[81 FR 3017, Jan. 20, 2016]

§75.364 Access to records.

(a) *Records of non-Federal entities.* The HHS awarding agency, Inspectors General, the Comptroller General of the United States, and the pass-through entity, or any of their authorized representatives, must have the right of access to any documents, papers, or other records of the non-Federal entity which are pertinent to the Federal award, in order to make audits, examinations, excerpts, and transcripts. The right also includes timely and reasonable access to the non-Federal entity's personnel for the purpose of interview and discussion related to such documents.

(b) Only under extraordinary and rare circumstances would such access include review of the true name of victims of a crime. Routine monitoring cannot be considered extraordinary and rare circumstances that would necessitate access to this information. When access to the true name of victims of a crime is necessary, appropriate steps to protect this sensitive information must be taken by both the non-Federal entity and the HHS awarding agency. Any such access, other than under a court order or subpoena pursuant to a bona fide confidential investigation, must be approved by the head of the HHS awarding agency or delegate.

(c) *Expiration of right of access.* The rights of access in this section are not limited to the required retention period but last as long as the records are retained. HHS awarding agencies and pass-through entities must not impose any other access requirements upon non-Federal entities.

§75.365 Restrictions on public access to records.

No HHS awarding agency may place restrictions on the non-Federal entity that limit public access to the records of the non-Federal entity pertinent to a Federal award, except for protected personally identifiable information (PII) or when the HHS awarding agency can demonstrate that such records will be kept confidential and would have been exempted from disclosure pursuant to the Freedom of Information Act (5 U.S.C. 552) or controlled unclassified information pursuant to Executive Order 13556 if the records had belonged to the HHS awarding agency. The Freedom of Information Act (5 U.S.C. 552) (FOIA) does not apply to those records that remain under a non-Federal entity's control except as required under §75.322. Unless required by Federal, state, local, or tribal statute, non-Federal entities are not required to permit public access to their records. The non-Federal entity's records provided to a Federal agency generally will be subject to FOIA and applicable exemptions.

§§75.366-75.370 [Reserved]

REMEDIES FOR NONCOMPLIANCE

§75.371 Remedies for noncompliance.

If a non-Federal entity fails to comply with Federal statutes, regulations, or the terms and conditions of a Federal award, the HHS awarding agency or pass-through entity may impose additional conditions, as described in §75.207. If the HHS awarding agency or pass-through entity determines that noncompliance cannot be remedied by imposing additional conditions, the HHS awarding agency or pass-through entity may take one or more of the following actions, as appropriate in the circumstances:

(a) Temporarily withhold cash payments pending correction of the deficiency by the non-Federal entity or more severe enforcement action by the HHS awarding agency or pass-through entity.

(b) Disallow (that is, deny both use of funds and any applicable matching credit for) all or part of the cost of the activity or action not in compliance.

(c) Wholly or partly suspend (suspension of award activities) or terminate the Federal award.

(d) Initiate suspension or debarment proceedings as authorized under 2 CFR part 180 and HHS awarding agency regulations at 2 CFR part 376 (or in the case of a pass-through entity, recommend such a proceeding be initiated by a HHS awarding agency).

(e) Withhold further Federal awards for the project or program.

(f) Take other remedies that may be legally available.

§75.372 Termination.

(a) The Federal award may be terminated in whole or in part as follows:

(1) By the HHS awarding agency or pass-through entity, if the non-Federal entity fails to comply with the terms and conditions of the award;

(2) By the HHS awarding agency or pass-through entity for cause;

(3) By the HHS awarding agency or pass-through entity with the consent of the non-Federal entity, in which case the two parties must agree upon the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated; or

(4) By the non-Federal entity upon sending to the HHS awarding agency or pass-through entity written notification setting forth the reasons for such termination, the effective date, and, in the case of partial termination, the portion to be terminated. However, if the HHS awarding agency or pass-through entity determines in the case of partial termination that the reduced or modified portion of the Federal award or subaward will not accomplish the purposes for which the Federal award was made, the HHS awarding agency or pass-through entity may terminate the Federal award in its entirety.

(b) When an HHS awarding agency terminates a Federal award prior to the end of the period of performance due to the non-Federal entity's material failure to comply with the Federal award terms and conditions, the HHS awarding agency must report the termination to the OMB-designated integrity and performance system accessible through SAM (currently FAPIIS).

(1) The information required under this paragraph (b) is not to be reported to the designated integrity and performance system until after the non-Federal entity either—

(i) Has exhausted its opportunities to object or challenge the decision, see §75.374; or

(ii) Has not, within 30 calendar days after being notified of the termination, informed the HHS awarding agency that it intends to appeal the HHS awarding agency's decision to terminate.

(2) If an HHS awarding agency, after entering information into the designated integrity and performance system about a termination, subsequently:

(i) Learns that any of the information is erroneous, the HHS awarding agency must correct the information in the system within three business days;

(ii) Obtains an update to that information that could be helpful to other Federal awarding agencies, the HHS awarding agency is strongly encouraged to amend the information in the system to incorporate the update in a timely way;

(3) HHS awarding agencies shall not post any information that will be made publicly available in the non-public segment of the designated integrity and performance system that is covered by a disclosure exemption under the Freedom of Information Act. If the non-Federal entity asserts within seven calendar days to the HHS awarding agency who posted the information, that some of the information made publicly available is covered by a disclosure exemption under the Freedom of Information Act, the HHS awarding agency who posted the information must remove the posting within seven calendar days of receiving the assertion. Prior to reposting the releasable information, the HHS agency must resolve the issue in accordance with the agency's Freedom of Information Act procedures.

(c) When a Federal award is terminated or partially terminated, both the HHS awarding agency or pass-through agency and the non-Federal entity remain responsible for compliance with the requirements of §§75.381 through 75.390.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3017, Jan. 20, 2016]

§75.373 Notification of termination requirement.

(a) The HHS awarding agency or pass-through entity must provide to the non-Federal entity a notice of termination.

(b) If the Federal award is terminated for the non-Federal entity's material failure to comply with the Federal statutes, regulations, or terms and conditions of the Federal award, the notification must state that—

(1) The termination decision will be reported to the OMB-designated integrity and performance system accessible through SAM (currently FAPIIS);

(2) The information will be available in the OMB-designated integrity and performance system for a period of five years from the date of the termination, then archived;

(3) HHS awarding agencies that consider making a Federal award to the non-Federal entity during that five year period must consider that information in judging whether the non-Federal entity is qualified to receive the Federal award, when the Federal share of the Federal award is expected to exceed the simplified acquisition threshold over the period of performance;

(4) The non-Federal entity may comment on any information the OMB-designated integrity and performance system contains about the non-Federal entity for future consideration by HHS awarding agencies. The non-Federal entity may submit comments to the awardee integrity and performance portal accessible through SAM (currently CPARS).

(5) Federal awarding agencies will consider non-Federal entity comments when determining whether the non-Federal entity is qualified for a future Federal award.

(c) Upon termination of a Federal award, the HHS awarding agency must provide the information required under FFATA to the Federal Web site established to fulfill the requirements of FFATA, and update or notify any other relevant government-wide systems or entities of any indications of poor performance as required by 41 U.S.C. 417b and 31 U.S.C. 3321 and implementing guidance at 2 CFR part 77 (forthcoming at time of publication). See also the requirements for Suspension and Debarment at 2 CFR part 180.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3017, Jan. 20, 2016]

§75.374 Opportunities to object, hearings, and appeals.

(a) Upon taking any remedy for non-compliance, the HHS awarding agency must provide the non-Federal entity an opportunity to object and provide information and documentation challenging the suspension or termination action, in accordance with written processes and procedures published by the HHS awarding agency. The HHS awarding agency or pass-through entity must comply with any requirements for hearings, appeals or other administrative proceedings to which the non-Federal entity is entitled under any statute or regulation applicable to the action involved.

(b) See also:

(1) 42 CFR part 50, subpart D for the Public Health Service Appeals Procedures,

(2) 45 CFR part 16 for the Procedures of the Departmental Appeals Board, and

(3) 45 CFR part 95, subpart A for the time limits for states to file claims.

(4) 45 CFR part 95, subpart E for the State cost allocation plan disapprovals.

§75.375 Effects of suspension and termination.

Costs to the non-Federal entity resulting from obligations incurred by the non-Federal entity during a suspension or after termination of a Federal award or subaward are not allowable unless the HHS awarding agency or pass-through entity expressly authorizes them in the notice of suspension or termination or subsequently. However, costs during suspension or after termination are allowable if:

(a) The costs result from obligations which were properly incurred by the non-Federal entity before the effective date of suspension or termination, are not in anticipation of it; and

(b) The costs would be allowable if the Federal award was not suspended or expired normally at the end of the period of performance in which the termination takes effect.

§§75.376-75.380 [Reserved]

CLOSEOUT

§75.381 Closeout.

The HHS awarding agency or pass-through entity will close-out the Federal award when it determines that all applicable administrative actions and all required work of the Federal award have been completed by the non-Federal entity. This section specifies the actions the non-Federal entity and

HHS awarding agency or pass-through entity must take to complete this process at the end of the period of performance.

(a) The non-Federal entity must submit, no later than 90 calendar days after the end date of the period of performance, all financial, performance, and other reports as required by the terms and conditions of the Federal award. The HHS awarding agency or pass-through entity may approve extensions when requested by the non-Federal entity.

(b) Unless the HHS awarding agency or pass-through entity authorizes an extension, a non-Federal entity must liquidate all obligations incurred under the Federal award not later than 90 calendar days after the end date of the period of performance as specified in the terms and conditions of the Federal award.

(c) The HHS awarding agency or pass-through entity must make prompt payments to the non-Federal entity for allowable reimbursable costs under the Federal award being closed out.

(d) The non-Federal entity must promptly refund any balances of unobligated cash that the HHS awarding agency or pass-through entity paid in advance or paid and that are not authorized to be retained by the non-Federal entity for use in other projects. See OMB Circular A-129 and see §75.391 for requirements regarding unreturned amounts that become delinquent debts.

(e) Consistent with the terms and conditions of the Federal award, the HHS awarding agency or pass-through entity must make a settlement for any upward or downward adjustments to the Federal share of costs after closeout reports are received.

(f) The non-Federal entity must account for any real and personal property acquired with Federal funds or received from the Federal Government in accordance with §§75.317 through 75.323 and 75.343.

(g) The HHS awarding agency or pass-through entity should complete all closeout actions for Federal awards no later than 180 calendar days after receipt and acceptance of all required final reports.

§§75.382-75.385 [Reserved]

POST-CLOSEOUT ADJUSTMENTS AND CONTINUING RESPONSIBILITIES

§75.386 Post-closeout adjustments and continuing responsibilities.

(a) The closeout of a Federal award does not affect any of the following:

(1) The right of the HHS awarding agency or pass-through entity to disallow costs and recover funds on the basis of a later audit or other review. The HHS awarding agency or pass-through entity must make any cost disallowance determination and notify the non-Federal entity within the record retention period.

(2) The obligation of the non-Federal entity to return any funds due as a result of later refunds, corrections, or other transactions including final indirect cost rate adjustments.

(3) Audit requirements in subpart F of this part.

(4) Property management and disposition requirements in §§75.317 through 75.323.

(5) Records retention as required in §§75.361 through 75.365.

(b) After closeout of the Federal award, a relationship created under the Federal award may be modified or ended in whole or in part with the consent of the HHS awarding agency or pass-through entity

and the non-Federal entity, provided the responsibilities of the non-Federal entity referred to in paragraph (a) of this section, including those for property management as applicable, are considered and provisions made for continuing responsibilities of the non-Federal entity, as appropriate.

§§75.387-75.390 [Reserved]

COLLECTION OF AMOUNTS DUE

§75.391 Collection of amounts due.

(a) Any funds paid to the non-Federal entity in excess of the amount to which the non-Federal entity is finally determined to be entitled under the terms of the Federal award constitute a debt to the Federal Government. If not paid within 90 calendar days after demand, the HHS awarding agency may reduce the debt by:

- (1) Making an administrative offset against other requests for reimbursements;
- (2) Withholding advance payments otherwise due to the non-Federal entity; or
- (3) Other action permitted by Federal statute.

(b) Except where otherwise provided by statutes or regulations, the HHS awarding agency will charge interest on an overdue debt in accordance with the Federal Claims Collection Standards (31 CFR parts 900 through 999). The date from which interest is computed is not extended by litigation or the filing of any form of appeal. (See also HHS Claims Collection regulations at 45 CFR part 30.)

Subpart E—Cost Principles

GENERAL PROVISIONS

§75.400 Policy guide.

The application of these cost principles is based on the fundamental premises that:

(a) The non-Federal entity is responsible for the efficient and effective administration of the Federal award through the application of sound management practices.

(b) The non-Federal entity assumes responsibility for administering Federal funds in a manner consistent with underlying agreements, program objectives, and the terms and conditions of the Federal award.

(c) The non-Federal entity, in recognition of its own unique combination of staff, facilities, and experience, has the primary responsibility for employing whatever form of sound organization and management techniques may be necessary in order to assure proper and efficient administration of the Federal-award.

(d) The application of these cost principles should require no significant changes in the internal accounting policies and practices of the non-Federal entity. However, the accounting practices of the non-Federal entity must be consistent with these cost principles and support the accumulation of costs as required by the principles, and must provide for adequate documentation to support costs charged to the Federal award.

(e) In reviewing, negotiating and approving cost allocation plans or indirect cost proposals, the cognizant agency for indirect costs should generally assure that the non-Federal entity is applying these cost accounting principles on a consistent basis during their review and negotiation of indirect cost proposals. Where wide variations exist in the treatment of a given cost item by the non-Federal entity, the reasonableness and equity of such treatments should be fully considered. See §75.2 *Indirect (facilities & administrative (F&A)) costs*.

(f) For non-Federal entities that educate and engage students in research, the dual role of students as both trainees and employees (including pre- and post-doctoral staff) contributing to the completion of Federal awards for research must be recognized in the application of these principles.

(g) The non-Federal entity may not earn or keep any profit resulting from Federal financial assistance, unless explicitly authorized by the terms and conditions of the Federal award. See also §75.307.

§75.401 Application.

(a) *General.* These principles must be used in determining the allowable costs of work performed by the non-Federal entity under Federal awards. These principles also must be used by the non-Federal entity as a guide in the pricing of fixed-price contracts and subcontracts where costs are used in determining the appropriate price. The principles do not apply to:

(1) Arrangements under which Federal financing is in the form of loans, scholarships, fellowships, traineeships, or other fixed amounts based on such items as education allowance or published tuition rates and fees.

(2) For IHEs, capitation awards, which are awards based on case counts or number of beneficiaries according to the terms and conditions of the Federal award.

(3) Fixed amount awards. See also §75.2 *Fixed amount awards* and 75.201.

(4) Federal awards to hospitals (see appendix IX to part 75).

(5) Other awards under which the non-Federal entity is not required to account to the Federal Government for actual costs incurred.

(b) *Federal Contract.* Where a Federal contract awarded to a non-Federal entity is subject to the Cost Accounting Standards (CAS), it incorporates the applicable CAS clauses, Standards, and CAS administration requirements per the 48 CFR Chapter 99 and 48 CFR part 30 (FAR part 30). CAS applies directly to the CAS-covered contract and the Cost Accounting Standards at 48 CFR parts 9904 or 9905 takes precedence over the cost principles in this subpart E with respect to the allocation of costs. When a contract with a non-Federal entity is subject to full CAS coverage, the allowability of certain costs under the cost principles will be affected by the allocation provisions of the Cost Accounting Standards (e.g., CAS 414-48 CFR 9904.414, and CAS 417-48 CFR 9904.417), apply rather the allowability provisions of §75.449. In complying with those requirements, the non-Federal entity's application of cost accounting practices for estimating, accumulating, and reporting costs for other Federal awards and other cost objectives under the CAS-covered contract still must be consistent with its cost accounting practices for the CAS-covered contracts. In all cases, only one set of accounting records needs to be maintained for the allocation of costs by the non-Federal entity.

(c) *Exemptions.* Some nonprofit organizations, because of their size and nature of operations, can be considered to be similar to for-profit entities for purpose of applicability of cost principles. Such nonprofit organizations must operate under Federal cost principles applicable to for-profit entities located

at 48 CFR 31.2. A listing of these organizations is contained in appendix VIII to part 75. Other organizations, as approved by the cognizant agency for indirect costs, may be added from time to time.

BASIC CONSIDERATIONS

§75.402 Composition of costs.

Total cost. The total cost of a Federal award is the sum of the allowable direct and allocable indirect costs less any applicable credits.

§75.403 Factors affecting allowability of costs.

Except where otherwise authorized by statute, costs must meet the following general criteria in order to be allowable under Federal awards:

(a) Be necessary and reasonable for the performance of the Federal award and be allocable thereto under these principles.

(b) Conform to any limitations or exclusions set forth in these principles or in the Federal award as to types or amount of cost items.

(c) Be consistent with policies and procedures that apply uniformly to both federally-financed and other activities of the non-Federal entity.

(d) Be accorded consistent treatment. A cost may not be assigned to a Federal award as a direct cost if any other cost incurred for the same purpose in like circumstances has been allocated to the Federal award as an indirect cost.

(e) Be determined in accordance with generally accepted accounting principles (GAAP), except, for state and local governments and Indian tribes only, as otherwise provided for in this part.

(f) Not be included as a cost or used to meet cost sharing or matching requirements of any other federally-financed program in either the current or a prior period. See also §75.306(b).

(g) Be adequately documented. See also §§75.300 through 75.309.

§75.404 Reasonable costs.

A cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person under the circumstances prevailing at the time the decision was made to incur the cost. The question of reasonableness is particularly important when the non-Federal entity is predominantly federally-funded. In determining reasonableness of a given cost, consideration must be given to:

(a) Whether the cost is of a type generally recognized as ordinary and necessary for the operation of the non-Federal entity or the proper and efficient performance of the Federal award.

(b) The restraints or requirements imposed by such factors as: Sound business practices; arm's-length bargaining; Federal, state, local, tribal, and other laws and regulations; and terms and conditions of the Federal award.

(c) Market prices for comparable goods or services for the geographic area.

(d) Whether the individuals concerned acted with prudence in the circumstances considering their responsibilities to the non-Federal entity, its employees, where applicable its students or membership, the public at large, and the Federal Government.

(e) Whether the non-Federal entity significantly deviates from its established practices and policies regarding the incurrence of costs, which may unjustifiably increase the Federal award's cost.

§75.405 Allocable costs.

(a) A cost is allocable to a particular Federal award or other cost objective if the goods or services involved are chargeable or assignable to that Federal award or cost objective in accordance with relative benefits received. This standard is met if the cost:

(1) Is incurred specifically for the Federal award;

(2) Benefits both the Federal award and other work of the non-Federal entity and can be distributed in proportions that may be approximated using reasonable methods; and

(3) Is necessary to the overall operation of the non-Federal entity and is assignable in part to the Federal award in accordance with the principles in this subpart.

(b) All activities which benefit from the non-Federal entity's indirect (F&A) cost, including unallowable activities and donated services by the non-Federal entity or third parties, will receive an appropriate allocation of indirect costs.

(c) Any cost allocable to a particular Federal award under the principles provided for in this part may not be charged to other Federal awards to overcome fund deficiencies, to avoid restrictions imposed by Federal statutes, regulations, or terms and conditions of the Federal awards, or for other reasons. However, this prohibition would not preclude the non-Federal entity from shifting costs that are allowable under two or more Federal awards in accordance with existing Federal statutes, regulations, or the terms and conditions of the Federal awards.

(d) Direct cost allocation principles. If a cost benefits two or more projects or activities in proportions that can be determined without undue effort or cost, the cost must be allocated to the projects based on the proportional benefit. If a cost benefits two or more projects or activities in proportions that cannot be determined because of the interrelationship of the work involved, then, notwithstanding paragraph (c) of this section, the costs may be allocated or transferred to benefitted projects on any reasonable documented basis. Where the purchase of equipment or other capital asset is specifically authorized under a Federal award, the costs are assignable to the Federal award regardless of the use that may be made of the equipment or other capital asset involved when no longer needed for the purpose for which it was originally required. See also §§75.317 through 75.323 and 75.439.

(e) If the contract is subject to CAS, costs must be allocated to the contract pursuant to the Cost Accounting Standards. To the extent that CAS is applicable, the allocation of costs in accordance with CAS takes precedence over the allocation provisions in this part.

§75.406 Applicable credits.

(a) Applicable credits refer to those receipts or reduction-of-expenditure-type transactions that offset or reduce expense items allocable to the Federal award as direct or indirect (F&A) costs. Examples of such transactions are: Purchase discounts, rebates or allowances, recoveries or indemnities on losses, insurance refunds or rebates, and adjustments of overpayments or erroneous charges. To the extent that

such credits accruing to or received by the non-Federal entity relate to allowable costs, they must be credited to the Federal award either as a cost reduction or cash refund, as appropriate.

(b) In some instances, the amounts received from the Federal Government to finance activities or service operations of the non-Federal entity should be treated as applicable credits. Specifically, the concept of netting such credit items (including any amounts used to meet cost sharing or matching requirements) must be recognized in determining the rates or amounts to be charged to the Federal award. (See §§75.436 and 75.468, for areas of potential application in the matter of Federal financing of

§75.407 Prior written approval (prior approval).

(a) Under any given Federal award, the reasonableness and allocability of certain items of costs may be difficult to determine. In order to avoid subsequent disallowance or dispute based on unreasonableness or non-allocability, the non-Federal entity may seek the prior written approval of the cognizant agency for indirect costs or the HHS awarding agency in advance of the incurrence of special or unusual costs. Prior written approval should include the timeframe or scope of the agreement. The absence of prior written approval on any element of cost will not, in itself, affect the reasonableness or allocability of that element, unless prior approval is specifically required for allowability as described under certain circumstances in the following sections of this part:

(1) §75.201 Use of grant agreements (including fixed amount awards), cooperative agreements, and contracts, paragraph (b)(5);

(2) §75.306 Cost sharing or matching;

(3) §75.307 Program income;

(4) §75.308 Revision of budget and program plans;

(5) §75.309 Period of performance and availability of funds;

(6) §75.318 Real property;

(7) §75.320 Equipment;

(8) §75.353 Fixed amount subawards;

(9) §75.413 Direct costs, paragraph (c);

(10) §75.430 Compensation—personal services, paragraph (h);

(11) §75.431 Compensation—fringe benefits;

(12) §75.438 Entertainment costs;

(13) §75.439 Equipment and other capital expenditures;

(14) §75.440 Exchange rates;

(15) §75.441 Fines, penalties, damages and other settlements;

(16) §75.442 Fund raising and investment management costs;

- (17) §75.445 Goods or services for personal use;
- (18) §75.447 Insurance and indemnification;
- (19) §75.454 Memberships, subscriptions, and professional activity costs, paragraph (c);
- (20) §75.455 Organization costs;
- (21) §75.456 Participant support costs;
- (22) §75.458 Pre-award costs;
- (23) §75.462 Rearrangement and reconversion costs;
- (24) §75.467 Selling and marketing costs;
- (25) §75.470 Taxes (including Value Added Tax) paragraph (c); and
- (26) §75.474 Travel costs.

(b) A request by a subrecipient for prior approval will be addressed in writing to the recipient. The recipient will promptly review such request and shall approve or disapprove the request in writing. A recipient will not approve any budget or project revision which is inconsistent with the purpose or terms and conditions of the Federal-award to the recipient. If the revision, requested by the subrecipient would result in a change to the recipient's approved project which requires Federal prior approval, the recipient will obtain the HHS awarding agency's approval before approving the subrecipient's request.

(c) For cost-reimbursement contracts under the FAR, the recipient shall obtain prior written approval in accordance with FAR 52.244-2.

§75.408 Limitation on allowance of costs.

The Federal award may be subject to statutory requirements that limit the allowability of costs. When the maximum amount allowable under a limitation is less than the total amount determined in accordance with the principles in this part, the amount not recoverable under the Federal award may not be charged to the Federal award.

§75.409 Special considerations.

In addition to the basic considerations regarding the allowability of costs highlighted in this subtitle, other subtitles in this part describe special considerations and requirements applicable to states, local governments, Indian tribes, and IHEs. In addition, certain provisions among the items of cost in this subpart are only applicable to certain types of non-Federal entities, as specified in the following sections:

- (a) Direct and Indirect (F&A) Costs (§§75.412 through 75.415);
- (b) Special Considerations for States, Local Governments and Indian Tribes (§§75.416 and 75.417);
and
- (c) Special Considerations for Institutions of Higher Education (§§75.418 and 75.419).

§75.410 Collection of unallowable costs.

Payments made for costs determined to be unallowable by either the HHS awarding agency, cognizant agency for indirect costs, or pass-through entity, either as direct or indirect costs, must be refunded (including interest) to the Federal Government in accordance with instructions from the Federal agency that determined the costs are unallowable unless Federal statute or regulation directs otherwise. See also subpart D of this part, §§75.300 through 75.309.

§75.411 Adjustment of previously negotiated indirect (F&A) cost rates containing unallowable costs.

(a) Negotiated indirect (F&A) cost rates based on a proposal later found to have included costs that:

(1) Are unallowable as specified by Federal statutes, regulations or the terms and conditions of a Federal award; or

(2) Are unallowable because they are not allocable to the Federal award(s), must be adjusted, or a refund must be made, in accordance with the requirements of this section. These adjustments or refunds are designed to correct the proposals used to establish the rates and do not constitute a reopening of the rate negotiation. The adjustments or refunds will be made regardless of the type of rate negotiated (predetermined, final, fixed, or provisional).

(b) For rates covering a future fiscal year of the non-Federal entity, the unallowable costs will be removed from the indirect (F&A) cost pools and the rates appropriately adjusted.

(c) For rates covering a past period, the Federal share of the unallowable costs will be computed for each year involved and a cash refund (including interest chargeable in accordance with applicable regulations) will be made to the Federal Government. If cash refunds are made for past periods covered by provisional or fixed rates, appropriate adjustments will be made when the rates are finalized to avoid duplicate recovery of the unallowable costs by the Federal Government.

(d) For rates covering the current period, either a rate adjustment or a refund, as described in paragraphs (b) and (c) of this section, must be required by the cognizant agency for indirect costs. The choice of method must be at the discretion of the cognizant agency for indirect costs, based on its judgment as to which method would be most practical.

(e) The amount or proportion of unallowable costs included in each year's rate will be assumed to be the same as the amount or proportion of unallowable costs included in the base year proposal used to establish the rate.

DIRECT AND INDIRECT (F&A) COSTS

§75.412 Classification of costs.

There is no universal rule for classifying certain costs as either direct or indirect (F&A) under every accounting system. A cost may be direct with respect to some specific service or function, but indirect with respect to the Federal award or other final cost objective. Therefore, it is essential that each item of cost incurred for the same purpose be treated consistently in like circumstances either as a direct or an indirect (F&A) cost in order to avoid possible double-charging of Federal awards. Guidelines for determining direct and indirect (F&A) costs charged to Federal awards are provided in this subpart.

§75.413 Direct costs.

(a) *General.* Direct costs are those costs that can be identified specifically with a particular final cost objective, such as a Federal award, or other internally or externally funded activity, or that can be directly assigned to such activities relatively easily with a high degree of accuracy. Costs incurred for the same purpose in like circumstances must be treated consistently as either direct or indirect (F&A) costs. See also §75.405.

(b) *Application to Federal awards.* Identification with the Federal award rather than the nature of the goods and services involved is the determining factor in distinguishing direct from indirect (F&A) costs of Federal awards. Typical costs charged directly to a Federal award are the compensation of employees who work on that award, their related fringe benefit costs, the costs of materials and other items of expense incurred for the Federal award. If directly related to a specific award, certain costs that otherwise would be treated as indirect costs may also include extraordinary utility consumption, the cost of materials supplied from stock or services rendered by specialized facilities or other institutional service operations.

(c) The salaries of administrative and clerical staff should normally be treated as indirect (F&A) costs. Direct charging of these costs may be appropriate only if all of the following conditions are met:

- (1) Administrative or clerical services are integral to a project or activity;
- (2) Individuals involved can be specifically identified with the project or activity;
- (3) Such costs are explicitly included in the budget or have the prior written approval of the Federal awarding agency; and
- (4) The costs are not also recovered as indirect costs.

(d) *Minor items.* Any direct cost of minor amount may be treated as an indirect (F&A) cost for reasons of practicality where such accounting treatment for that item of cost is consistently applied to all Federal and non-Federal cost objectives.

(e) The costs of certain activities are not allowable as charges to Federal awards. However, even though these costs are unallowable for purposes of computing charges to Federal awards, they nonetheless must be treated as direct costs for purposes of determining indirect (F&A) cost rates and be allocated their equitable share of the non-Federal entity's indirect costs if they represent activities which:

- (1) Include the salaries of personnel,
- (2) Occupy space, and
- (3) Benefit from the non-Federal entity's indirect (F&A) costs.

(f) For nonprofit organizations, the costs of activities performed by the non-Federal entity primarily as a service to members, clients, or the general public when significant and necessary to the non-Federal entity's mission must be treated as direct costs whether or not allowable, and be allocated an equitable share of indirect (F&A) costs. Some examples of these types of activities include:

(1) Maintenance of membership rolls, subscriptions, publications, and related functions. See also §75.454.

(2) Providing services and information to members, legislative or administrative bodies, or the public. See also §§75.454 and 75.450.

(3) Promotion, lobbying, and other forms of public relations. See also §§75.421 and 75.450.

(4) Conferences except those held to conduct the general administration of the non-Federal entity. See also §75.432.

(5) Maintenance, protection, and investment of special funds not used in operation of the non-Federal entity. See also §75.442.

(6) Administration of group benefits on behalf of members or clients, including life and hospital insurance, annuity or retirement plans, and financial aid. See also §75.431.

§75.414 Indirect (F&A) costs.

(a) *Facilities and Administration Classification.* For major IHEs and major nonprofit organizations, indirect (F&A) costs must be classified within two broad categories: “Facilities” and “Administration.” “Facilities” is defined as depreciation on buildings, equipment and capital improvement, interest on debt associated with certain buildings, equipment and capital improvements, and operations and maintenance expenses. “Administration” is defined as general administration and general expenses such as the director's office, accounting, personnel and all other types of expenditures not listed specifically under one of the subcategories of “Facilities” (including cross allocations from other pools, where applicable). For nonprofit organizations, library expenses are included in the “Administration” category; for institutions of higher education, they are included in the “Facilities” category. Major IHEs are defined as those required to use the Standard Format for Submission as noted in appendix III to part 75.C. 11. Major nonprofit organizations are those which receive more than \$10 million dollars in direct Federal funding.

(b) *Diversity of nonprofit organizations.* Because of the diverse characteristics and accounting practices of nonprofit organizations, it is not possible to specify the types of cost which may be classified as indirect (F&A) cost in all situations. Identification with a Federal award rather than the nature of the goods and services involved is the determining factor in distinguishing direct from indirect (F&A) costs of Federal awards. However, typical examples of indirect (F&A) cost for many nonprofit organizations may include depreciation on buildings and equipment, the costs of operating and maintaining facilities, and general administration and general expenses, such as the salaries and expenses of executive officers, personnel administration, and accounting.

(c) *Federal Agency Acceptance of Negotiated Indirect Cost Rates.* (See also §75.306.)

(1) The negotiated rates must be accepted by all Federal awarding agencies. An HHS awarding agency may use a rate different from the negotiated rate for a class of Federal awards or a single Federal award only when required by Federal statute or regulation, or when approved by a Federal awarding agency head or delegate based on documented justification as described in paragraph (c)(3) of this section.

(2) The HHS awarding agency head or delegate must notify OMB of any approved deviations.

(3) The HHS awarding agency must implement, and make publicly available, the policies, procedures and general decision making criteria that their programs will follow to seek and justify deviations from negotiated rates.

(4) As required under §75.203(c), the HHS awarding agency must include in the notice of funding opportunity the policies relating to indirect cost rate reimbursement, matching, or cost share as approved. See also appendix I.C.2 and D.6 of this part. As appropriate, the HHS agency should incorporate discussion of these policies into their outreach activities with non-Federal entities prior to the posting of a notice of funding opportunity.

(d) Pass-through entities are subject to the requirements in §75.352(a)(4).

(e) Requirements for development and submission of indirect (F&A) cost rate proposals and cost allocation plans are contained in appendices III-VII, and appendix IX as follows:

(1) Appendix III to Part 75—Indirect (F&A) Costs Identification and Assignment, and Rate Determination for Institutions of Higher Education (IHEs);

(2) Appendix IV to Part 75—Indirect (F&A) Costs Identification and Assignment, and Rate Determination for Nonprofit Organizations;

(3) Appendix V to Part 75—State/Local Governmentwide Central Service Cost Allocation Plans;

(4) Appendix VI to Part 75—Public Assistance Cost Allocation Plans;

(5) Appendix VII to Part 75—States and Local Government and Indian Tribe Indirect Cost Proposals; and

(6) Appendix IX to Part 75—Principles for Determining Costs Applicable to Research and Development Under Grants and Contracts with Hospitals.

(f) In addition to the procedures outlined in the appendices in paragraph (e) of this section, any non-Federal entity that has never received a negotiated indirect cost rate, except for those non-Federal entities described in appendix VII to part 75 (D)(1)(b) may elect to charge a de minimis rate of 10% of modified total direct costs (MTDC) which may be used indefinitely. As described in §75.403, costs must be consistently charged as either indirect or direct costs, but may not be double charged or inconsistently charged as both. If chosen, this methodology once elected must be used consistently for all Federal awards until such time as a non-Federal entity chooses to negotiate for a rate, which the non-Federal entity may apply to do at any time.

(g) Any non-Federal entity that has a current federally negotiated indirect cost rate may apply for a one-time extension of the rates in that agreement for a period of up to four years. This extension will be subject to the review and approval of the cognizant agency for indirect costs. If an extension is granted the non-Federal entity may not request a rate review until the extension period ends. At the end of the 4-year extension, the non-Federal entity must re-apply to negotiate a rate. Subsequent one-time extensions (up to four years) are permitted if a renegotiation is completed between each extension request.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3017, Jan. 20, 2016]

§75.415 Required certifications.

Required certifications include:

(a) To assure that expenditures are proper and in accordance with the terms and conditions of the Federal award and approved project budgets, the annual and final fiscal reports or vouchers requesting payment under the agreements must include a certification, signed by an official who is authorized to legally bind the non-Federal entity, which reads as follows: "By signing this report, I certify to the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and objectives set forth in the terms and conditions of the Federal award. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (U.S. Code Title 18, Section 1001 and Title 31, Sections 3729-3730 and 3801-3812)."

(b) Certification of cost allocation plan or indirect (F&A) cost rate proposal. Each cost allocation plan or indirect (F&A) cost rate proposal must comply with the following:

(1) A proposal to establish a cost allocation plan or an indirect (F&A) cost rate, whether submitted to a Federal cognizant agency for indirect costs or maintained on file by the non-Federal entity, must be certified by the non-Federal entity using the Certificate of Cost Allocation Plan or Certificate of Indirect Costs as set forth in appendices III through VII, and appendix IX. The certificate must be signed on behalf of the non-Federal entity by an individual at a level no lower than vice president or chief financial officer of the non-Federal entity that submits the proposal.

(2) Unless the non-Federal entity has elected the option under §75.414(f), the Federal Government may either disallow all indirect (F&A) costs or unilaterally establish such a plan or rate when the non-Federal entity fails to submit a certified proposal for establishing such a plan or rate in accordance with the requirements. Such a plan or rate may be based upon audited historical data or such other data that have been furnished to the cognizant agency for indirect costs and for which it can be demonstrated that all unallowable costs have been excluded. When a cost allocation plan or indirect cost rate is unilaterally established by the Federal Government because the non-Federal entity failed to submit a certified proposal, the plan or rate established will be set to ensure that potentially unallowable costs will not be reimbursed.

(c) Certifications by non-profit organizations as appropriate that they did not meet the definition of a major non-profit organization as defined in §75.414(a).

(d) See also §75.450 for another required certification.

SPECIAL CONSIDERATIONS FOR STATES, LOCAL GOVERNMENTS AND INDIAN TRIBES

§75.416 Cost allocation plans and indirect cost proposals.

(a) For states, local governments and Indian tribes, certain services, such as motor pools, computer centers, purchasing, accounting, etc., are provided to operating agencies on a centralized basis. Since Federal awards are performed within the individual operating agencies, there needs to be a process whereby these central service costs can be identified and assigned to benefitted activities on a reasonable and consistent basis. The central service cost allocation plan provides that process.

(b) Individual operating agencies (governmental department or agency), normally charge Federal awards for indirect costs through an indirect cost rate. A separate indirect cost rate(s) proposal for each operating agency is usually necessary to claim indirect costs under Federal-awards. Indirect costs include:

(1) The indirect costs originating in each department or agency of the governmental unit carrying out Federal awards; and

(2) The costs of central governmental services distributed through the central service cost allocation plan and not otherwise treated as direct costs.

(c) The requirements for development and submission of cost allocation plans (for central service costs and public assistance programs) and indirect cost rate proposals are contained in appendices IV, V and VI to this part.

§75.417 Interagency service.

The cost of services provided by one agency to another within the governmental unit may include allowable direct costs of the service plus a pro-rated share of indirect costs. A standard indirect cost allowance equal to ten percent of the direct salary and wage cost of providing the service (excluding overtime, shift premiums, and fringe benefits) may be used in lieu of determining the actual indirect costs of the service. These services do not include centralized services included in central service cost allocation plans as described in appendix V to this part.

SPECIAL CONSIDERATIONS FOR INSTITUTIONS OF HIGHER EDUCATION

§75.418 Costs incurred by states and local governments.

Costs incurred or paid by a state or local government on behalf of its IHEs for fringe benefit programs, such as pension costs and FICA and any other costs specifically incurred on behalf of, and in direct benefit to, the IHEs, are allowable costs of such IHEs whether or not these costs are recorded in the accounting records of the institutions, subject to the following:

- (a) The costs meet the requirements of §§75.402 through 75.411;
- (b) The costs are properly supported by approved cost allocation plans in accordance with applicable Federal cost accounting principles in this part; and
- (c) The costs are not otherwise borne directly or indirectly by the Federal Government.

§75.419 Cost accounting standards and disclosure statement.

(a) An IHE that receives aggregate Federal awards totaling \$50 million or more in Federal awards subject to this part in its most recently completed fiscal year must comply with the Cost Accounting Standards Board's cost accounting standards located at 48 CFR 9905.501, 9905.502, 9905.505, and 9905.506. CAS-covered contracts awarded to the IHEs are subject to the CAS requirements at 48 CFR parts 9900 through 9999 and 48 CFR part 30 (FAR part 30).

(b) *Disclosure statement.* An IHE that receives aggregate Federal awards totaling \$50 million or more subject to this part during its most recently completed fiscal year must disclose their cost accounting practices by filing a Disclosure Statement (DS-2), which is reproduced in appendix III to part 75. With the approval of the cognizant agency for indirect costs, an IHE may meet the DS-2 submission by submitting the DS-2 for each business unit that received \$50 million or more in Federal awards.

(1) The DS-2 must be submitted to the cognizant agency for indirect costs with a copy to the IHE's cognizant agency for audit.

(2) An IHE is responsible for maintaining an accurate DS-2 and complying with disclosed cost accounting practices. An IHE must file amendments to the DS-2 to the cognizant agency for indirect costs six months in advance of a disclosed practice being changed to comply with a new or modified standard, or when a practice is changed for other reasons. An IHE may proceed with implementing the change only if it has not been notified by the Federal cognizant agency for indirect costs that either a longer period will be needed for review or there are concerns with the potential change within the six months period. Amendments of a DS-2 may be submitted at any time. Resubmission of a complete, updated DS-2 is discouraged except when there are extensive changes to disclosed practices.

(3) *Cost and funding adjustments.* Cost adjustments must be made by the cognizant agency for indirect costs if an IHE fails to comply with the cost policies in this part or fails to consistently follow its established or disclosed cost accounting practices when estimating, accumulating or reporting the costs of Federal awards, and the aggregate cost impact on Federal awards is material. The cost adjustment

must normally be made on an aggregate basis for all affected Federal awards through an adjustment of the IHE's future F&A costs rates or other means considered appropriate by the cognizant agency for indirect costs. Under the terms of CAS covered contracts, adjustments in the amount of funding provided may also be required when the estimated proposal costs were not determined in accordance with established cost accounting practices.

(4) *Overpayments.* Excess amounts paid in the aggregate by the Federal Government under Federal awards due to a noncompliant cost accounting practice used to estimate, accumulate, or report costs must be credited or refunded, as deemed appropriate by the cognizant agency for indirect costs. Interest applicable to the excess amounts paid in the aggregate during the period of noncompliance must also be determined and collected in accordance with applicable HHS agency regulations.

(5) *Compliant cost accounting practice changes.* Changes from one compliant cost accounting practice to another compliant practice that are approved by the cognizant agency for indirect costs may require cost adjustments if the change has a material effect on Federal awards and the changes are deemed appropriate by the cognizant agency for indirect costs.

(6) *Responsibilities.* The cognizant agency for indirect cost must:

(i) Determine cost adjustments for all Federal awards in the aggregate on behalf of the Federal Government. Actions of the cognizant agency for indirect cost in making cost adjustment determinations must be coordinated with all affected HHS awarding agencies to the extent necessary.

(ii) Prescribe guidelines and establish internal procedures to promptly determine on behalf of the Federal Government that a DS-2 adequately discloses the IHE's cost accounting practices and that the disclosed practices are compliant with applicable CAS and the requirements of this part.

(iii) Distribute to all affected Federal awarding agencies any DS-2 determination of adequacy or noncompliance.

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GENERAL PROVISIONS FOR SELECTED ITEMS OF COST

§75.420 Considerations for selected items of cost.

This section provides principles to be applied in establishing the allowability of certain items involved in determining cost, in addition to the requirements of §§75.402 through 75.411. These principles apply whether or not a particular item of cost is properly treated as direct cost or indirect (F&A) cost. Failure to mention a particular item of cost is not intended to imply that it is either allowable or unallowable; rather, determination as to allowability in each case should be based on the treatment provided for similar or related items of cost, and based on the principles described in §§75.402 through 75.411. In case of a discrepancy between the provisions of a specific Federal award and the provisions below, the Federal award governs. Criteria outlined in §75.403 must be applied in determining allowability. See also §75.102.

§75.421 Advertising and public relations.

(a) The term advertising costs means the costs of advertising media and corollary administrative costs. Advertising media include magazines, newspapers, radio and television, direct mail, exhibits, electronic or computer transmittals, and the like.

(b) The only allowable advertising costs are those which are solely for:

(1) The recruitment of personnel required by the non-Federal entity for performance of a Federal award (See also §75.463);

(2) The procurement of goods and services for the performance of a Federal award;

(3) The disposal of scrap or surplus materials acquired in the performance of a Federal award except when non-Federal entities are reimbursed for disposal costs at a predetermined amount; or

(4) Program outreach and other specific purposes necessary to meet the requirements of the Federal award.

(c) The term “public relations” includes community relations and means those activities dedicated to maintaining the image of the non-Federal entity or maintaining or promoting understanding and favorable relations with the community or public at large or any segment of the public.

(d) The only allowable public relations costs are:

(1) Costs specifically required by the Federal award;

(2) Costs of communicating with the public and press pertaining to specific activities or accomplishments which result from performance of the Federal award (these costs are considered necessary as part of the outreach effort for the Federal award); or

(3) Costs of conducting general liaison with news media and government public relations officers, to the extent that such activities are limited to communication and liaison necessary to keep the public informed on matters of public concern, such as notices of funding opportunities, financial matters, etc.

(e) Unallowable advertising and public relations costs include the following:

(1) All advertising and public relations costs other than as specified in paragraphs (b) and (d) of this section;

(2) Costs of meetings, conventions, convocations, or other events related to other activities of the entity (see also §75.432), including:

(i) Costs of displays, demonstrations, and exhibits;

(ii) Costs of meeting rooms, hospitality suites, and other special facilities used in conjunction with shows and other special events; and

(iii) Salaries and wages of employees engaged in setting up and displaying exhibits, making demonstrations, and providing briefings;

(3) Costs of promotional items and memorabilia, including models, gifts, and souvenirs;

(4) Costs of advertising and public relations designed solely to promote the non-Federal entity.

§75.422 Advisory councils.

Costs incurred by advisory councils or committees are unallowable unless authorized by statute, the HHS awarding agency or as an indirect cost where allocable to Federal awards. See §75.444, applicable to states, local governments and Indian tribes.

§75.423 Alcoholic beverages.

Costs of alcoholic beverages are unallowable.

§75.424 Alumni/ae activities.

Costs incurred by IHEs for, or in support of, alumni/ae activities are unallowable.

§75.425 Audit services.

(a) A reasonably proportionate share of the costs of audits required by, and performed in accordance with, the Single Audit Act Amendments of 1996 (31 U.S.C. 7501-7507), as implemented by requirements of this part, are allowable. However, the following audit costs are unallowable:

(1) Any costs when audits required by the Single Audit Act and subpart F of this part—have not been conducted or have been conducted but not in accordance therewith; and

(2) Any costs of auditing a non-Federal entity that is exempted from having an audit conducted under the Single Audit Act and subpart F of this part because its expenditures under Federal awards are less than \$750,000 during the non-Federal entity's fiscal year.

(b) The costs of a financial statement audit of a non-Federal entity that does not currently have a Federal award may be included in the indirect cost pool for a cost allocation plan or indirect cost proposal.

(c) Pass-through entities may charge Federal awards for the cost of agreed-upon-procedures engagements to monitor subrecipients (in accordance with subpart D of this part, §§75.351 through 75.353) which are exempted from the requirements of the Single Audit Act and subpart F of this part. This cost is allowable only if the agreed-upon-procedures engagements are:

(1) Conducted in accordance with GAGAS attestation standards;

(2) Paid for and arranged by the pass-through entity; and

(3) Limited in scope to one or more of the following types of compliance requirements: activities allowed or unallowed; allowable costs/cost principles; eligibility; and reporting.

§75.426 Bad debts.

Bad debts (debts which have been determined to be uncollectable), including losses (whether actual or estimated) arising from uncollectable accounts and other claims, are unallowable. Related collection costs, and related legal costs, arising from such debts after they have been determined to be uncollectable are also unallowable. See also §75.428.

§75.427 Bonding costs.

(a) Bonding costs arise when the HHS awarding agency requires assurance against financial loss to itself or others by reason of the act or default of the non-Federal entity. They arise also in instances where the non-Federal entity requires similar assurance, including: Bonds as bid, performance, payment, advance payment, infringement, and fidelity bonds for employees and officials.

(b) Costs of bonding required pursuant to the terms and conditions of the Federal award are allowable.

(c) Costs of bonding required by the non-Federal entity in the general conduct of its operations are allowable as an indirect cost to the extent that such bonding is in accordance with sound business practice and the rates and premiums are reasonable under the circumstances.

§75.428 Collections of improper payments.

The costs incurred by a non-Federal entity to recover improper payments are allowable as either direct or indirect costs, as appropriate. Amounts collected may be used by the non-Federal entity in accordance with cash management standards set forth in §75.305.

§75.429 Commencement and convocation costs.

For IHEs, costs incurred for commencements and convocations are unallowable, except as provided for in appendix III.B.9, as student activity costs.

§75.430 Compensation—personal services.

(a) *General.* Compensation for personal services includes all remuneration, paid currently or accrued, for services of employees rendered during the period of performance under the Federal award, including but not necessarily limited to wages and salaries. Compensation for personal services may also include fringe benefits which are addressed in §75.431. Costs of compensation are allowable to the extent that they satisfy the specific requirements of this part, and that the total compensation for individual employees:

(1) Is reasonable for the services rendered and conforms to the established written policy of the non-Federal entity consistently applied to both Federal and non-Federal activities;

(2) Follows an appointment made in accordance with a non-Federal entity's laws and/or rules or written policies and meets the requirements of Federal statute, where applicable; and

(3) Is determined and supported as provided in paragraph (i) of this section, when applicable.

(b) *Reasonableness.* Compensation for employees engaged in work on Federal awards will be considered reasonable to the extent that it is consistent with that paid for similar work in other activities of the non-Federal entity. In cases where the kinds of employees required for Federal awards are not found in the other activities of the non-Federal entity, compensation will be considered reasonable to the extent that it is comparable to that paid for similar work in the labor market in which the non-Federal entity competes for the kind of employees involved.

(c) *Professional activities outside the non-Federal entity.* Unless an arrangement is specifically authorized by an HHS awarding agency, a non-Federal entity must follow its written non-Federal entity-wide policies and practices concerning the permissible extent of professional services that can be provided outside the non-Federal entity for non-organizational compensation. Where such non-Federal entity-wide written policies do not exist or do not adequately define the permissible extent of consulting or other non-organizational activities undertaken for extra outside pay, the Federal Government may require that the effort of professional staff working on Federal awards be allocated between:

(1) Non-Federal entity activities, and

(2) Non-organizational professional activities. If the HHS awarding agency considers the extent of non-organizational professional effort excessive or inconsistent with the conflicts-of-interest terms and conditions of the Federal award, appropriate arrangements governing compensation will be negotiated on a case-by-case basis.

(d) *Unallowable costs.* (1) Costs which are unallowable under other sections of these principles must not be allowable under this section solely on the basis that they constitute personnel compensation.

(2) The allowable compensation for certain employees is subject to a ceiling in accordance with statute. For the amount of the ceiling for cost-reimbursement contracts, the covered compensation subject to the ceiling, the covered employees, and other relevant provisions, see 10 U.S.C. 2324(e)(1)(P), and 41 U.S.C. 1127 and 4304(a)(16). For other types of Federal awards, other statutory ceilings may apply.

(e) *Special considerations.* Special considerations in determining allowability of compensation will be given to any change in a non-Federal entity's compensation policy resulting in a substantial increase in its employees' level of compensation (particularly when the change was concurrent with an increase in the ratio of Federal awards to other activities) or any change in the treatment of allowability of specific types of compensation due to changes in Federal policy.

(f) *Incentive compensation.* Incentive compensation to employees based on cost reduction, or efficient performance, suggestion awards, safety awards, etc., is allowable to the extent that the overall compensation is determined to be reasonable and such costs are paid or accrued pursuant to an agreement entered into in good faith between the non-Federal entity and the employees before the services were rendered, or pursuant to an established plan followed by the non-Federal entity so consistently as to imply, in effect, an agreement to make such payment.

(g) *Nonprofit organizations.* For compensation to members of nonprofit organizations, trustees, directors, associates, officers, or the immediate families thereof, determination must be made that such compensation is reasonable for the actual personal services rendered rather than a distribution of earnings in excess of costs. This may include director's and executive committee member's fees, incentive awards, allowances for off-site pay, incentive pay, location allowances, hardship pay, and cost-of-living differentials.

(h) *Institutions of higher education (IHEs).* (1) Certain conditions require special consideration and possible limitations in determining allowable personnel compensation costs under Federal awards. Among such conditions are the following:

(i) Allowable activities. Charges to Federal awards may include reasonable amounts for activities contributing and directly related to work under an agreement, such as delivering special lectures about specific aspects of the ongoing activity, writing reports and articles, developing and maintaining protocols (human, animals, etc.), managing substances/chemicals, managing and securing project-specific data, coordinating research subjects, participating in appropriate seminars, consulting with colleagues and graduate students, and attending meetings and conferences.

(ii) Incidental activities. Incidental activities for which supplemental compensation is allowable under written institutional policy (at a rate not to exceed institutional base salary) need not be included in the records described in paragraph (i) of this section to directly charge payments of incidental activities, such activities must either be specifically provided for in the Federal award budget or receive prior written approval by the HHS awarding agency.

(2) *Salary basis.* Charges for work performed on Federal awards by faculty members during the academic year are allowable at the IBS rate. Except as noted in paragraph (h)(1)(ii) of this section, in no event will charges to Federal awards, irrespective of the basis of computation, exceed the proportionate share of the IBS for that period. This principle applies to all members of faculty at an institution. IBS is defined as the annual compensation paid by an IHE for an individual's appointment, whether that individual's time is spent on research, instruction, administration, or other activities. IBS excludes any income that an individual earns outside of duties performed for the IHE. Unless there is prior approval by

the HHS awarding agency, charges of a faculty member's salary to a Federal award must not exceed the proportionate share of the IBS for the period during which the faculty member worked on the award.

(3) *Intra-Institution of Higher Education (IHE) consulting.* Intra-IHE consulting by faculty is assumed to be undertaken as an IHE obligation requiring no compensation in addition to IBS. However, in unusual cases where consultation is across departmental lines or involves a separate or remote operation, and the work performed by the faculty member is in addition to his or her regular responsibilities, any charges for such work representing additional compensation above IBS are allowable provided that such consulting arrangements are specifically provided for in the Federal award or approved in writing by the HHS awarding agency.

(4) Extra Service Pay normally represents overload compensation, subject to institutional compensation policies for services above and beyond IBS. Where extra service pay is a result of Intra-IHE consulting, it is subject to the same requirements of paragraph (b) above. It is allowable if all of the following conditions are met:

(i) The non-Federal entity establishes consistent written policies which apply uniformly to all faculty members, not just those working on Federal awards.

(ii) The non-Federal entity establishes a consistent written definition of work covered by IBS which is specific enough to determine conclusively when work beyond that level has occurred. This may be described in appointment letters or other documentations.

(iii) The supplementation amount paid is commensurate with the IBS rate of pay and the amount of additional work performed. See paragraph (h)(2) of this section.

(iv) The salaries, as supplemented, fall within the salary structure and pay ranges established by and documented in writing or otherwise applicable to the non-Federal entity.

(v) The total salaries charged to Federal awards including extra service pay are subject to the Standards of Documentation as described in paragraph (i) of this section.

(5) *Periods outside the academic year.* (i) Except as specified for teaching activity in paragraph (h)(5)(ii) of this section, charges for work performed by faculty members on Federal awards during periods not included in the base salary period will be at a rate not in excess of the IBS.

(ii) Charges for teaching activities performed (by faculty members on Federal awards during periods not included in IBS period will be based on the normal written policy of the IHE governing compensation to faculty members for teaching assignments during such periods.

(6) *Part-time faculty.* Charges for work performed on Federal awards by faculty members having only part-time appointments will be determined at a rate not in excess of that regularly paid for part-time assignments.

(7) *Sabbatical leave costs.* Rules for sabbatical leave are as follow:

(i) Costs of leaves of absence by employees for performance of graduate work or sabbatical study, travel, or research are allowable provided the IHE has a uniform written policy on sabbatical leave for persons engaged in instruction and persons engaged in research. Such costs will be allocated on an equitable basis among all related activities of the IHE.

(ii) Where sabbatical leave is included in fringe benefits for which a cost is determined for assessment as a direct charge, the aggregate amount of such assessments applicable to all work of the

institution during the base period must be reasonable in relation to the IHE's actual experience under its sabbatical leave policy.

(8) *Salary rates for non-faculty members.* Non-faculty full-time professional personnel may also earn "extra service pay" in accordance with the non-Federal entity's written policy and consistent with paragraph (h)(1)(i) of this section.

(i) *Standards for documentation of personnel expenses.* (1) Charges to Federal awards for salaries and wages must be based on records that accurately reflect the work performed. These records must:

(i) Be supported by a system of internal control which provides reasonable assurance that the charges are accurate, allowable, and properly allocated;

(ii) Be incorporated into the official records of the non-Federal entity;

(iii) Reasonably reflect the total activity for which the employee is compensated by the non-Federal entity, not exceeding 100% of compensated activities (for IHE, this per the IHE's definition of IBS);

(iv) Encompass both federally assisted and all other activities compensated by the non-Federal entity on an integrated basis, but may include the use of subsidiary records as defined in the non-Federal entity's written policy;

(v) Comply with the established accounting policies and practices of the non-Federal entity (See paragraph (h)(1)(ii) of this section for treatment of incidental work for IHEs.); and

(vi) [Reserved]

(vii) Support the distribution of the employee's salary or wages among specific activities or cost objectives if the employee works on more than one Federal award; a Federal award and non-Federal award; an indirect cost activity and a direct cost activity; two or more indirect activities which are allocated using different allocation bases; or an unallowable activity and a direct or indirect cost activity.

(viii) Budget estimates (*i.e.*, estimates determined before the services are performed) alone do not qualify as support for charges to Federal awards, but may be used for interim accounting purposes, provided that:

(A) The system for establishing the estimates produces reasonable approximations of the activity actually performed;

(B) Significant changes in the corresponding work activity (as defined by the non-Federal entity's written policies) are identified and entered into the records in a timely manner. Short term (such as one or two months) fluctuation between workload categories need not be considered as long as the distribution of salaries and wages is reasonable over the longer term; and

(C) The non-Federal entity's system of internal controls includes processes to review after-the-fact interim charges made to a Federal awards based on budget estimates. All necessary adjustment must be made such that the final amount charged to the Federal award is accurate, allowable, and properly allocated.

(ix) Because practices vary as to the activity constituting a full workload (for IHEs, IBS), records may reflect categories of activities expressed as a percentage distribution of total activities.

(x) It is recognized that teaching, research, service, and administration are often inextricably intermingled in an academic setting. When recording salaries and wages charged to Federal awards for IHEs, a precise assessment of factors that contribute to costs is therefore not always feasible, nor is it expected.

(2) For records which meet the standards required in paragraph (i)(1) of this section, the non-Federal entity will not be required to provide additional support or documentation for the work performed, other than that referenced in paragraph (i)(3) of this section.

(3) In accordance with Department of Labor regulations implementing the Fair Labor Standards Act (FLSA) (29 CFR part 516), charges for the salaries and wages of nonexempt employees, in addition to the supporting documentation described in this section, must also be supported by records indicating the total number of hours worked each day.

(4) Salaries and wages of employees used in meeting cost sharing or matching requirements on Federal awards must be supported in the same manner as salaries and wages claimed for reimbursement from Federal awards.

(5) For states, local governments and Indian tribes, substitute processes or systems for allocating salaries and wages to Federal awards may be used in place of or in addition to the records described in paragraph (i)(1) of this section if approved by the cognizant agency for indirect cost. Such systems may include, but are not limited to, random moment sampling, "rolling" time studies, case counts, or other quantifiable measures of work performed.

(i) Substitute systems which use sampling methods (primarily for Temporary Assistance for Needy Families (TANF), the Supplemental Nutrition Assistance Program (SNAP), Medicaid, and other public assistance programs) must meet acceptable statistical sampling standards including:

(A) The sampling universe must include all of the employees whose salaries and wages are to be allocated based on sample results except as provided in paragraph (i)(5)(iii) of this section;

(B) The entire time period involved must be covered by the sample; and

(C) The results must be statistically valid and applied to the period being sampled.

(ii) Allocating charges for the sampled employees' supervisors, clerical and support staffs, based on the results of the sampled employees, will be acceptable.

(iii) Less than full compliance with the statistical sampling standards noted in paragraph (i)(5)(i) of this section may be accepted by the cognizant agency for indirect costs if it concludes that the amounts to be allocated to Federal awards will be minimal, or if it concludes that the system proposed by the non-Federal entity will result in lower costs to Federal awards than a system which complies with the standards.

(6) Cognizant agencies for indirect costs are encouraged to approve alternative proposals based on outcomes and milestones for program performance where these are clearly documented. Where approved by the Federal cognizant agency for indirect costs, these plans are acceptable as an alternative to the requirements of paragraph (i)(1) of this section.

(7) For Federal awards of similar purpose activity or instances of approved blended funding, a non-Federal entity may submit performance plans that incorporate funds from multiple Federal awards and account for their combined use based on performance-oriented metrics, provided that such plans are approved in advance by all involved HHS awarding agencies. In these instances, the non-Federal entity

must submit a request for waiver of the requirements based on documentation that describes the method of charging costs, relates the charging of costs to the specific activity that is applicable to all fund sources, and is based on quantifiable measures of the activity in relation to time charged.

(8) For a non-Federal entity where the records do not meet the standards described in this section, the Federal Government may require personnel activity reports, including prescribed certifications, or equivalent documentation that support the records as required in this section.

§75.431 Compensation—fringe benefits.

(a) Fringe benefits are allowances and services provided by employers to their employees as compensation in addition to regular salaries and wages. Fringe benefits include, but are not limited to, the costs of leave (vacation, family-related, sick or military), employee insurance, pensions, and unemployment benefit plans. Except as provided elsewhere in these principles, the costs of fringe benefits are allowable provided that the benefits are reasonable and are required by law, non-Federal entity-employee agreement, or an established policy of the non-Federal entity.

(b) *Leave.* The cost of fringe benefits in the form of regular compensation paid to employees during periods of authorized absences from the job, such as for annual leave, family-related leave, sick leave, holidays, court leave, military leave, administrative leave, and other similar benefits, are allowable if all of the following criteria are met:

(1) They are provided under established written leave policies;

(2) The costs are equitably allocated to all related activities, including Federal awards; and,

(3) The accounting basis (cash or accrual) selected for costing each type of leave is consistently followed by the non-Federal entity or specified grouping of employees.

(i) When a non-Federal entity uses the cash basis of accounting, the cost of leave is recognized in the period that the leave is taken and paid for. Payments for unused leave when an employee retires or terminates employment are allowable in the year of payment.

(ii) The accrual basis may be only used for those types of leave for which a liability as defined by GAAP exists when the leave is earned. When a non-Federal entity uses the accrual basis of accounting, allowable leave costs are the lesser of the amount accrued or funded.

(c) The cost of fringe benefits in the form of employer contributions or expenses for social security; employee life, health, unemployment, and worker's compensation insurance (except as indicated in §75.447); pension plan costs (see paragraph (i) of this section); and other similar benefits are allowable, provided such benefits are granted under established written policies. Such benefits, must be allocated to Federal awards and all other activities in a manner consistent with the pattern of benefits attributable to the individuals or group(s) of employees whose salaries and wages are chargeable to such Federal awards and other activities, and charged as direct or indirect costs in accordance with the non-Federal entity's accounting practices.

(d) Fringe benefits may be assigned to cost objectives by identifying specific benefits to specific individual employees or by allocating on the basis of entity-wide salaries and wages of the employees receiving the benefits. When the allocation method is used, separate allocations must be made to selective groupings of employees, unless the non-Federal entity demonstrates that costs in relationship to salaries and wages do not differ significantly for different groups of employees.

(e) *Insurance.* See also §75.447(d)(1) and (2).

(1) Provisions for a reserve under a self-insurance program for unemployment compensation or workers' compensation are allowable to the extent that the provisions represent reasonable estimates of the liabilities for such compensation, and the types of coverage, extent of coverage, and rates and premiums would have been allowable had insurance been purchased to cover the risks. However, provisions for self-insured liabilities which do not become payable for more than one year after the provision is made must not exceed the present value of the liability.

(2) Costs of insurance on the lives of trustees, officers, or other employees holding positions of similar responsibility are allowable only to the extent that the insurance represents additional compensation. The costs of such insurance when the non-Federal entity is named as beneficiary are unallowable.

(3) Actual claims paid to or on behalf of employees or former employees for workers' compensation, unemployment compensation, severance pay, and similar employee benefits (e.g., post-retirement health benefits), are allowable in the year of payment provided that the non-Federal entity follows a consistent costing policy.

(f) *Automobiles*. That portion of automobile costs furnished by the entity that relates to personal use by employees (including transportation to and from work) is unallowable as fringe benefit or indirect (F&A) costs regardless of whether the cost is reported as taxable income to the employees.

(g) *Pension plan costs*. Pension plan costs which are incurred in accordance with the established policies of the non-Federal entity are allowable, provided that:

(1) Such policies meet the test of reasonableness.

(2) The methods of cost allocation are not discriminatory.

(3) For entities using accrual based accounting, the cost assigned to each fiscal year is determined in accordance with GAAP.

(4) The costs assigned to a given fiscal year are funded for all plan participants within six months after the end of that year. However, increases to normal and past service pension costs caused by a delay in funding the actuarial liability beyond 30 calendar days after each quarter of the year to which such costs are assignable are unallowable. Non-Federal entity may elect to follow the "Cost Accounting Standard for Composition and Measurement of Pension Costs" (48 CFR 9904.412).

(5) Pension plan termination insurance premiums paid pursuant to the Employee Retirement Income Security Act (ERISA) of 1974 (29 U.S.C. 1301-1461) are allowable. Late payment charges on such premiums are unallowable. Excise taxes on accumulated funding deficiencies and other penalties imposed under ERISA are unallowable.

(6) Pension plan costs may be computed using a pay-as-you-go method or an acceptable actuarial cost method in accordance with established written policies of the non-Federal entity.

(i) For pension plans financed on a pay-as-you-go method, allowable costs will be limited to those representing actual payments to retirees or their beneficiaries.

(ii) Pension costs calculated using an actuarial cost-based method recognized by GAAP are allowable for a given fiscal year if they are funded for that year within six months after the end of that year. Costs funded after the six month period (or a later period agreed to by the cognizant agency for indirect costs) are allowable in the year funded. The cognizant agency for indirect costs may agree to an extension of the six month period if an appropriate adjustment is made to compensate for the timing of

the charges to the Federal Government and related Federal reimbursement and the non-Federal entity's contribution to the pension fund. Adjustments may be made by cash refund or other equitable procedures to compensate the Federal Government for the time value of Federal reimbursements in excess of contributions to the pension fund.

(iii) Amounts funded by the non-Federal entity in excess of the actuarially determined amount for a fiscal year may be used as the non-Federal entity's contribution in future periods.

(iv) When a non-Federal entity converts to an acceptable actuarial cost method, as defined by GAAP, and funds pension costs in accordance with this method, the unfunded liability at the time of conversion is allowable if amortized over a period of years in accordance with GAAP.

(v) The Federal Government must receive an equitable share of any previously allowed pension costs (including earnings thereon) which revert or inure to the non-Federal entity in the form of a refund, withdrawal, or other credit.

(h) *Post-retirement health.* Post-retirement health plans (PRHP) refers to costs of health insurance or health services not included in a pension plan covered by paragraph (g) of this section for retirees and their spouses, dependents, and survivors. PRHP costs may be computed using a pay-as-you-go method or an acceptable actuarial cost method in accordance with established written policies of the non-Federal entity.

(1) For PRHP financed on a pay-as-you-go method, allowable costs will be limited to those representing actual payments to retirees or their beneficiaries.

(2) PRHP costs calculated using an actuarial cost method recognized by GAAP are allowable if they are funded for that year within six months after the end of that year. Costs funded after the six month period (or a later period agreed to by the cognizant agency) are allowable in the year funded. The Federal cognizant agency for indirect costs may agree to an extension of the six month period if an appropriate adjustment is made to compensate for the timing of the charges to the Federal Government and related Federal reimbursements and the non-Federal entity's contributions to the PRHP fund. Adjustments may be made by cash refund, reduction in current year's PRHP costs, or other equitable procedures to compensate the Federal Government for the time value of Federal reimbursements in excess of contributions to the PRHP fund.

(3) Amounts funded in excess of the actuarially determined amount for a fiscal year may be used as the non-Federal entity contribution in a future period.

(4) When a non-Federal entity converts to an acceptable actuarial cost method and funds PRHP costs in accordance with this method, the initial unfunded liability attributable to prior years is allowable if amortized over a period of years in accordance with GAAP, or, if no such GAAP period exists, over a period negotiated with the cognizant agency for indirect costs.

(5) To be allowable in the current year, the PRHP costs must be paid either to:

(i) An insurer or other benefit provider as current year costs or premiums, or

(ii) An insurer or trustee to maintain a trust fund or reserve for the sole purpose of providing post-retirement benefits to retirees and other beneficiaries.

(6) The Federal Government must receive an equitable share of any amounts of previously allowed post-retirement benefit costs (including earnings thereon) which revert or inure to the non-Federal entity in the form of a refund, withdrawal, or other credit.

(i) *Severance pay.* (1) Severance pay, also commonly referred to as dismissal wages, is a payment in addition to regular salaries and wages, by non-Federal entities to workers whose employment is being terminated. Costs of severance pay are allowable only to the extent that in each case, it is required by:

(i) Law;

(ii) Employer-employee agreement;

(iii) Established policy that constitutes, in effect, an implied agreement on the non-Federal entity's part; or

(iv) Circumstances of the particular employment.

(2) Costs of severance payments are divided into two categories as follows:

(i) Actual normal turnover severance payments must be allocated to all activities; or, where the non-Federal entity provides for a reserve for normal severances, such method will be acceptable if the charge to current operations is reasonable in light of payments actually made for normal severances over a representative past period, and if amounts charged are allocated to all activities of the non-Federal entity.

(ii) Measurement of costs of abnormal or mass severance pay by means of an accrual will not achieve equity to both parties. Thus, accruals for this purpose are not allowable. However, the Federal Government recognizes its obligation to participate, to the extent of its fair share, in any specific payment. Prior approval by the Federal awarding agency or cognizant agency for indirect cost, as appropriate, is required.

(3) Costs incurred in certain severance pay packages which are in an amount in excess of the normal severance pay paid by the non-Federal entity to an employee upon termination of employment and are paid to the employee contingent upon a change in management control over, or ownership of, the non-Federal entity's assets, are unallowable.

(4) Severance payments to foreign nationals employed by the non-Federal entity outside the United States, to the extent that the amount exceeds the customary or prevailing practices for the non-Federal entity in the United States, are unallowable, unless they are necessary for the performance of Federal programs and approved by the HHS awarding agency.

(5) Severance payments to foreign nationals employed by the non-Federal entity outside the United States due to the termination of the foreign national as a result of the closing of, or curtailment of activities by, the non-Federal entity in that country, are unallowable, unless they are necessary for the performance of Federal programs and approved by the HHS awarding agency.

(j) *For IHEs only.* (1) Fringe benefits in the form of undergraduate and graduate tuition or remission of tuition for individual employees are allowable, provided such benefits are granted in accordance with established non-federal entity policies, and are distributed to all non-Federal entity activities on an equitable basis. Tuition benefits for family members other than the employee are unallowable.

(2) Fringe benefits in the form of tuition or remission of tuition for individual employees not employed by IHEs are limited to the tax-free amount allowed per section 127 of the Internal Revenue Code as amended.

(3) IHEs may offer employees tuition waivers or tuition reductions, provided that the benefit does not discriminate in favor of highly compensated employees. Employees can exercise these benefits at other

institutions according to institutional policy. See §75.466 for treatment of tuition remission provided to students.

(k) For IHEs whose costs are paid by state or local governments, fringe benefit programs (such as pension costs and FICA) and any other benefits costs specifically incurred on behalf of, and in direct benefit to, the non-Federal entity, are allowable costs of such non-Federal entities whether or not these costs are recorded in the accounting records of the non-Federal entities, subject to the following:

- (1) The costs meet the requirements of Basic Considerations in §§75.402 through 75.411;
- (2) The costs are properly supported by approved cost allocation plans in accordance with applicable Federal cost accounting principles; and
- (3) The costs are not otherwise borne directly or indirectly by the Federal Government.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3017, Jan. 20, 2016]

§75.432 Conferences.

A conference is defined as a meeting, retreat, seminar, symposium, workshop or event whose primary purpose is the dissemination of technical information beyond the non-Federal entity and is necessary and reasonable for successful performance under the Federal award. Allowable conference costs paid by the non-Federal entity as a sponsor or host of the conference may include rental of facilities, speakers' fees, costs of meals and refreshments, local transportation, and other items incidental to such conferences unless further restricted by the terms and conditions of the Federal award. As needed, the costs of identifying, but not providing, locally available dependent-care resources are allowable. Conference hosts/sponsors must exercise discretion and judgment in ensuring that conference costs are appropriate, necessary and managed in a manner that minimizes costs to the Federal award. The HHS awarding agency may authorize exceptions where appropriate for programs including Indian tribes, children, and the elderly. See also §§75.438, 75.456, 75.474, and 75.475.

§75.433 Contingency provisions.

(a) Contingency is that part of a budget estimate of future costs (typically of large construction projects, IT systems, or other items as approved by the HHS awarding agency) which is associated with possible events or conditions arising from causes the precise outcome of which is indeterminable at the time of estimate, and that experience shows will likely result, in aggregate, in additional costs for the approved activity or project. Amounts for major project scope changes, unforeseen risks, or extraordinary events may not be included.

(b) It is permissible for contingency amounts other than those excluded in paragraph (a) of this section to be explicitly included in budget estimates, to the extent they are necessary to improve the precision of those estimates. Amounts must be estimated using broadly-accepted cost estimating methodologies, specified in the budget documentation of the Federal award, and accepted by the HHS awarding agency. As such, contingency amounts are to be included in the Federal award. In order for actual costs incurred to be allowable, they must comply with the cost principles and other requirements in this part (see also §§75.300 through 75.309 of subpart D of this part and 75.403); be necessary and reasonable for proper and efficient accomplishment of project or program objectives, and be verifiable from the non-Federal entity's records.

(c) Payments made by the HHS awarding agency to the non-Federal entity's "contingency reserve" or any similar payment made for events the occurrence of which cannot be foretold with certainty as to the time or intensity, or with an assurance of their happening, are unallowable, except as noted in §§75.431 and 75.447.

§75.434 Contributions and donations.

(a) Costs of contributions and donations, including cash, property, and services, from the non-Federal entity to other entities, are unallowable.

(b) The value of services and property donated to the non-Federal entity may not be charged to the Federal award either as a direct or indirect (F&A) cost. The value of donated services and property may be used to meet cost sharing or matching requirements (see §75.306). Depreciation on donated assets is permitted in accordance with §75.436, as long as the donated property is not counted towards cost sharing or matching requirements.

(c) Services donated or volunteered to the non-Federal entity may be furnished to a non-Federal entity by professional and technical personnel, consultants, and other skilled and unskilled labor. The value of these services may not be charged to the Federal award either as a direct or indirect cost. However, the value of donated services may be used to meet cost sharing or matching requirements in accordance with the provisions of §75.306.

(d) To the extent feasible, services donated to the non-Federal entity will be supported by the same methods used to support the allocability of regular personnel services.

(e) The following provisions apply to nonprofit organizations. The value of services donated to the nonprofit organization utilized in the performance of a direct cost activity must be considered in the determination of the non-Federal entity's indirect cost rate(s) and, accordingly, must be allocated a proportionate share of applicable indirect costs when the following circumstances exist:

(1) The aggregate value of the services is material;

(2) The services are supported by a significant amount of the indirect costs incurred by the non-Federal entity;

(i) In those instances where there is no basis for determining the fair market value of the services rendered, the non-Federal entity and the cognizant agency for indirect costs must negotiate an appropriate allocation of indirect cost to the services.

(ii) Where donated services directly benefit a project supported by the Federal award, the indirect costs allocated to the services will be considered as a part of the total costs of the project. Such indirect costs may be reimbursed under the Federal award or used to meet cost sharing or matching requirements.

(f) Fair market value of donated services must be computed as described in §75.306.

(g) *Personal property and use of space.* (1) Donated personal property and use of space may be furnished to a non-Federal entity. The value of the personal property and space may not be charged to the Federal award either as a direct or indirect cost.

(2) The value of the donations may be used to meet cost sharing or matching share requirements under the conditions described in §§75.300 through 75.309 of subpart D of this part. The value of the donations must be determined in accordance with §§75.300 through 75.309. Where donations are treated as indirect costs, indirect cost rates will separate the value of the donations so that reimbursement will not be made.

§75.435 Defense and prosecution of criminal and civil proceedings, claims, appeals, and patent infringements.

(a) *Definitions for the purposes of this section.* (1) *Conviction* means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon verdict or a plea, including a conviction due to a plea of nolo contendere.

(2) *Costs* include the services of in-house or private counsel, accountants, consultants, or others engaged to assist the non-Federal entity before, during, and after commencement of a judicial or administrative proceeding, that bear a direct relationship to the proceeding.

(3) *Fraud* means:

(i) Acts of fraud or corruption or attempts to defraud the Federal Government or to corrupt its agents,

(ii) Acts that constitute a cause for debarment or suspension (as specified in agency regulations), and

(iii) Acts which violate the False Claims Act (31 U.S.C. 3729-3732) or the Anti-kickback Act (41 U.S.C. 1320a-7b(b)).

(4) *Penalty* does not include restitution, reimbursement, or compensatory damages.

(5) *Proceeding* includes an investigation.

(b) *Costs.* (1) Except as otherwise described herein, costs incurred in connection with any criminal, civil or administrative proceeding (including filing of a false certification) commenced by the Federal Government, a state, local government, or foreign government, or joined by the Federal Government (including a proceeding under the False Claims Act), against the non-Federal entity, (or commenced by third parties or a current or former employee of the non-Federal entity who submits a whistleblower complaint of reprisal in accordance with 10 U.S.C. 2409 or 41 U.S.C. 4712), are not allowable if the proceeding:

(i) Relates to a violation of, or failure to comply with, a Federal, state, local or foreign statute, regulation or the terms and conditions of the Federal award, by the non-Federal entity (including its agents and employees); and

(ii) Results in any of the following dispositions:

(A) In a criminal proceeding, a conviction.

(B) In a civil or administrative proceeding involving an allegation of fraud or similar misconduct, a determination of non-Federal entity liability.

(C) In the case of any civil or administrative proceeding, the disallowance of costs or the imposition of a monetary penalty, or an order issued by the HHS awarding agency head or delegate to the non-Federal entity to take corrective action under 10 U.S.C. 2409 or 41 U.S.C. 4712.

(D) A final decision by an appropriate Federal official to debar or suspend the non-Federal entity, to rescind or void a Federal award, or to terminate a Federal award by reason of a violation or failure to comply with a statute, regulation, or the terms and conditions of the Federal award.

(E) A disposition by consent or compromise, if the action could have resulted in any of the dispositions described in paragraphs (b)(1)(ii)(A) through (D) of this section.

(2) If more than one proceeding involves the same alleged misconduct, the costs of all such proceedings are unallowable if any results in one of the dispositions shown in paragraph (b) of this section.

(c) If a proceeding referred to in paragraph (b) of this section is commenced by the Federal Government and is resolved by consent or compromise pursuant to an agreement by the non-Federal entity and the Federal Government, then the costs incurred may be allowed to the extent specifically provided in such agreement.

(d) If a proceeding referred to in paragraph (b) of this section is commenced by a state, local or foreign government, the authorized Federal official may allow the costs incurred if such authorized official determines that the costs were incurred as a result of:

(1) A specific term or condition of the Federal award, or

(2) Specific written direction of an authorized official of the HHS awarding agency.

(e) Costs incurred in connection with proceedings described in paragraph (b) of this section, which are not made unallowable by that subsection, may be allowed but only to the extent that:

(1) The costs are reasonable and necessary in relation to the administration of the Federal award and activities required to deal with the proceeding and the underlying cause of action;

(2) Payment of the reasonable, necessary, allocable and otherwise allowable costs incurred is not prohibited by any other provision(s) of the Federal award;

(3) The costs are not recovered from the Federal Government or a third party, either directly as a result of the proceeding or otherwise; and,

(4) An authorized Federal official must determine the percentage of costs allowed considering the complexity of litigation, generally accepted principles governing the award of legal fees in civil actions involving the United States, and such other factors as may be appropriate. Such percentage must not exceed 80 percent. However, if an agreement reached under paragraph (c) of this section has explicitly considered this 80 percent limitation and permitted a higher percentage, then the full amount of costs resulting from that agreement are allowable.

(f) Costs incurred by the non-Federal entity in connection with the defense of suits brought by its employees or ex-employees under section 2 of the Major Fraud Act of 1988 (18 U.S.C. 1031), including the cost of all relief necessary to make such employee whole, where the non-Federal entity was found liable or settled, are unallowable.

(g) Costs of prosecution of claims against the Federal Government, including appeals of final HHS agency decisions, are unallowable.

(h) Costs of legal, accounting, and consultant services, and related costs, incurred in connection with patent infringement litigation, are unallowable unless otherwise provided for in the Federal award.

(i) Costs which may be unallowable under this section, including directly associated costs, must be segregated and accounted for separately. During the pendency of any proceeding covered by paragraphs (b) and (f) of this section, the Federal Government must generally withhold payment of such costs. However, if in its best interests, the Federal Government may provide for conditional payment upon provision of adequate security, or other adequate assurance, and agreement to repay all unallowable costs, plus interest, if the costs are subsequently determined to be unallowable.

§75.436 Depreciation.

(a) Depreciation is the method for allocating the cost of fixed assets to periods benefitting from asset use. The non-Federal entity may be compensated for the use of its buildings, capital improvements, equipment, and software projects capitalized in accordance with GAAP, provided that they are used, needed in the non-Federal entity's activities, and properly allocated to Federal awards. Such compensation must be made by computing depreciation.

(b) The allocation for depreciation must be made in accordance with appendices III through IX.

(c) Depreciation is computed applying the following rules. The computation of depreciation must be based on the acquisition cost of the assets involved. For an asset donated to the non-Federal entity by a third party, its fair market value at the time of the donation must be considered as the acquisition cost. Such assets may be depreciated or claimed as matching but not both. For the purpose of computing depreciation, the acquisition cost will exclude:

(1) The cost of land;

(2) Any portion of the cost of buildings and equipment borne by or donated by the Federal Government, irrespective of where title was originally vested or where it is presently located;

(3) Any portion of the cost of buildings and equipment contributed by or for the non-Federal entity, where law or agreement prohibits recovery; and

(4) Any asset acquired solely for the performance of a non-Federal award.

(d) When computing depreciation charges, the following must be observed:

(1) The period of useful service or useful life established in each case for usable capital assets must take into consideration such factors as type of construction, nature of the equipment, technological developments in the particular area, historical data, and the renewal and replacement policies followed for the individual items or classes of assets involved.

(2) The depreciation method used to charge the cost of an asset (or group of assets) to accounting periods must reflect the pattern of consumption of the asset during its useful life. In the absence of clear evidence indicating that the expected consumption of the asset will be significantly greater in the early portions than in the later portions of its useful life, the straight-line method must be presumed to be the appropriate method. Depreciation methods once used may not be changed unless approved in advance by the cognizant agency. The depreciation methods used to calculate the depreciation amounts for indirect (F&A) rate purposes must be the same methods used by the non-Federal entity for its financial statements.

(3) The entire building, including the shell and all components, may be treated as a single asset and depreciated over a single useful life. A building may also be divided into multiple components. Each component item may then be depreciated over its estimated useful life. The building components must be grouped into three general components of a building: building shell (including construction and design costs), building services systems (e.g., elevators, HVAC, plumbing system and heating and air-conditioning system) and fixed equipment (e.g., sterilizers, casework, fume hoods, cold rooms and glassware/washers). In exceptional cases, a cognizant agency may authorize a non-Federal entity to use more than these three groupings. When a non-Federal entity elects to depreciate its buildings by its components, the same depreciation methods must be used for indirect (F&A) purposes and financial statements purposes, as described in paragraphs (d)(1) and (2) of this section.

(4) No depreciation may be allowed on any assets that have outlived their depreciable lives.

(5) Where the depreciation method is introduced to replace the use allowance method, depreciation must be computed as if the asset had been depreciated over its entire life (*i.e.*, from the date the asset was acquired and ready for use to the date of disposal or withdrawal from service). The total amount of use allowance and depreciation for an asset (including imputed depreciation applicable to periods prior to the conversion from the use allowance method as well as depreciation after the conversion) may not exceed the total acquisition cost of the asset.

(e) Charges for depreciation must be supported by adequate property records, and physical inventories must be taken at least once every two years to ensure that the assets exist and are usable, used, and needed. Statistical sampling techniques may be used in taking these inventories. In addition, adequate depreciation records showing the amount of depreciation taken each period must also be maintained.

§75.437 Employee health and welfare costs.

(a) Costs incurred in accordance with the non-Federal entity's documented policies for the improvement of working conditions, employer-employee relations, employee health, and employee performance are allowable.

(b) Such costs will be equitably apportioned to all activities of the non-Federal entity. Income generated from any of these activities will be credited to the cost thereof unless such income has been irrevocably sent to employee welfare organizations.

(c) Losses resulting from operating food services are allowable only if the non-Federal entity's objective is to operate such services on a break-even basis. Losses sustained because of operating objectives other than the above are allowable only:

(1) Where the non-Federal entity can demonstrate unusual circumstances; and

(2) With the approval of the cognizant agency for indirect costs.

§75.438 Entertainment costs.

Costs of entertainment, including amusement, diversion, and social activities and any associated costs are unallowable, except where specific costs that might otherwise be considered entertainment have a programmatic purpose and are authorized either in the approved budget for the Federal award or with prior written approval of the HHS awarding agency.

§75.439 Equipment and other capital expenditures.

(a) See §75.2 for the definitions of *Capital expenditures*, *Equipment*, *Special purpose equipment*, *General purpose equipment*, *Acquisition cost*, and *Capital assets*.

(b) The following rules of allowability must apply to equipment and other capital expenditures:

(1) Capital expenditures for general purpose equipment, buildings, and land are unallowable as direct charges, except with the prior written approval of the HHS awarding agency or pass-through entity.

(2) Capital expenditures for special purpose equipment are allowable as direct costs, provided that items with a unit cost of \$5,000 or more have the prior written approval of the HHS awarding agency or pass-through entity.

(3) Capital expenditures for improvements to land, buildings, or equipment which materially increase their value or useful life are unallowable as a direct cost except with the prior written approval of the HHS awarding agency, or pass-through entity. See §75.436 for rules on the allowability of depreciation on buildings, capital improvements, and equipment. See also §75.465.

(4) When approved as a direct charge pursuant to paragraphs (b)(1) through (3) of this section, capital expenditures will be charged in the period in which the expenditure is incurred, or as otherwise determined appropriate and negotiated with the HHS awarding agency.

(5) The unamortized portion of any equipment written off as a result of a change in capitalization levels may be recovered by continuing to claim the otherwise allowable depreciation on the equipment, or by amortizing the amount to be written off over a period of years negotiated with the Federal cognizant agency for indirect cost.

(6) Cost of equipment disposal. If the non-Federal entity is instructed by the HHS awarding agency to otherwise dispose of or transfer the equipment the costs of such disposal or transfer are allowable.

(7) Equipment and other capital expenditures are unallowable as indirect costs. See §75.436.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3018, Jan. 20, 2016]

§75.440 Exchange rates.

(a) Cost increases for fluctuations in exchange rates are allowable costs subject to the availability of funding. Prior approval of exchange rate fluctuations is required only when the change results in the need for additional Federal funding, or the increased costs result in the need to significantly reduce the scope of the project. The HHS awarding agency must however ensure that adequate funds are available to cover currency fluctuations in order to avoid a violation of the Anti-Deficiency Act.

(b) The non-Federal entity is required to make reviews of local currency gains to determine the need for additional federal funding before the expiration date of the Federal award. Subsequent adjustments for currency increases may be allowable only when the non-Federal entity provides the HHS awarding agency with adequate source documentation from a commonly used source in effect at the time the expense was made, and to the extent that sufficient Federal funds are available.

§75.441 Fines, penalties, damages and other settlements.

Costs resulting from non-Federal entity violations of, alleged violations of, or failure to comply with, Federal, state, tribal, local or foreign laws and regulations are unallowable, except when incurred as a result of compliance with specific provisions of the Federal award, or with prior written approval of the HHS awarding agency. See also §75.435.

§75.442 Fund raising and investment management costs.

(a) Costs of organized fund raising, including financial campaigns, endowment drives, solicitation of gifts and bequests, and similar expenses incurred to raise capital or obtain contributions are unallowable. Fund raising costs for the purposes of meeting the Federal program objectives are allowable with prior written approval from the Federal awarding agency. Proposal costs are covered in §75.460.

(b) Costs of investment counsel and staff and similar expenses incurred to enhance income from investments are unallowable except when associated with investments covering pension, self-insurance, or other funds which include Federal participation allowed by this part.

(c) Costs related to the physical custody and control of monies and securities are allowable.

(d) Both allowable and unallowable fund raising and investment activities must be allocated an appropriate share of indirect costs under the conditions described in §75.413.

§75.443 Gains and losses on disposition of depreciable assets.

(a) Gains and losses on the sale, retirement, or other disposition of depreciable property must be included in the year in which they occur as credits or charges to the asset cost grouping(s) in which the property was included. The amount of the gain or loss to be included as a credit or charge to the appropriate asset cost grouping(s) is the difference between the amount realized on the property and the undepreciated basis of the property.

(b) Gains and losses from the disposition of depreciable property must not be recognized as a separate credit or charge under the following conditions:

(1) The gain or loss is processed through a depreciation account and is reflected in the depreciation allowable under §§75.436 and 75.439.

(2) The property is given in exchange as part of the purchase price of a similar item and the gain or loss is taken into account in determining the depreciation cost basis of the new item.

(3) A loss results from the failure to maintain permissible insurance, except as otherwise provided in §75.447.

(4) Compensation for the use of the property was provided through use allowances in lieu of depreciation.

(5) Gains and losses arising from mass or extraordinary sales, retirements, or other dispositions must be considered on a case-by-case basis.

(c) Gains or losses of any nature arising from the sale or exchange of property other than the property covered in paragraph (a) of this section, *e.g.*, land, must be excluded in computing Federal award costs.

(d) When assets acquired with Federal funds, in part or wholly, are disposed of, the distribution of the proceeds must be made in accordance with §§75.317 through 75.323.

§75.444 General costs of government.

(a) For states, local governments, and Indian Tribes, the general costs of government are unallowable (except as provided in §75.474). Unallowable costs include:

(1) Salaries and expenses of the Office of the Governor of a state or the chief executive of a local government or the chief executive of an Indian tribe;

(2) Salaries and other expenses of a state legislature, tribal council, or similar local governmental body, such as a county supervisor, city council, school board, etc., whether incurred for purposes of legislation or executive direction;

(3) Costs of the judicial branch of a government;

(4) Costs of prosecutorial activities unless treated as a direct cost to a specific program if authorized by statute or regulation (however, this does not preclude the allowability of other legal activities of the Attorney General as described in §75.435); and

(5) Costs of other general types of government services normally provided to the general public, such as fire and police, unless provided for as a direct cost under a program statute or regulation.

(b) For Indian tribes and Councils of Governments (COGs) (see §75.2 *Local government*), up to 50% of salaries and expenses directly attributable to managing and operating Federal programs by the chief executive and his or her staff can be included in the indirect cost calculation without documentation.

§75.445 Goods or services for personal use.

(a) Costs of goods or services for personal use of the non-Federal entity's employees are unallowable regardless of whether the cost is reported as taxable income to the employees.

(b) Costs of housing (*e.g.*, depreciation, maintenance, utilities, furnishings, rent), housing allowances and personal living expenses are only allowable as direct costs regardless of whether reported as taxable income to the employees. In addition, to be allowable direct costs must be approved in advance by an HHS awarding agency.

§75.446 Idle facilities and idle capacity.

(a) As used in this section the following terms have the meanings set forth in this section:

(1) Facilities means land and buildings or any portion thereof, equipment individually or collectively, or any other tangible capital asset, wherever located, and whether owned or leased by the non-Federal entity.

(2) Idle facilities means completely unused facilities that are excess to the non-Federal entity's current needs.

(3) Idle capacity means the unused capacity of partially used facilities. It is the difference between:

(i) That which a facility could achieve under 100 percent operating time on a one-shift basis less operating interruptions resulting from time lost for repairs, setups, unsatisfactory materials, and other normal delays and;

(ii) The extent to which the facility was actually used to meet demands during the accounting period. A multi-shift basis should be used if it can be shown that this amount of usage would normally be expected for the type of facility involved.

(4) Cost of idle facilities or idle capacity means costs such as maintenance, repair, housing, rent, and other related costs, *e.g.*, insurance, interest, and depreciation. These costs could include the costs of idle public safety emergency facilities, telecommunications, or information technology system capacity that is built to withstand major fluctuations in load, *e.g.*, consolidated data centers.

(b) The costs of idle facilities are unallowable except to the extent that:

(1) They are necessary to meet workload requirements which may fluctuate and are allocated appropriately to all benefiting programs; or

(2) Although not necessary to meet fluctuations in workload, they were necessary when acquired and are now idle because of changes in program requirements, efforts to achieve more economical operations, reorganization, termination, or other causes which could not have been reasonably foreseen. Under the exception stated in this subsection, costs of idle facilities are allowable for a reasonable period of time, ordinarily not to exceed one year, depending on the initiative taken to use, lease, or dispose of such facilities.

(c) The costs of idle capacity are normal costs of doing business and are a factor in the normal fluctuations of usage or indirect cost rates from period to period. Such costs are allowable, provided that the capacity is reasonably anticipated to be necessary to carry out the purpose of the Federal award or was originally reasonable and is not subject to reduction or elimination by use on other Federal awards, subletting, renting, or sale, in accordance with sound business, economic, or security practices. Widespread idle capacity throughout an entire facility or among a group of assets having substantially the same function may be considered idle facilities.

§75.447 Insurance and indemnification.

(a) Costs of insurance required or approved and maintained, pursuant to the Federal award, are allowable.

(b) Costs of other insurance in connection with the general conduct of activities are allowable subject to the following limitations:

(1) Types and extent and cost of coverage are in accordance with the non-Federal entity's policy and sound business practice.

(2) Costs of insurance or of contributions to any reserve covering the risk of loss of, or damage to, Federal Government property are unallowable except to the extent that the HHS awarding agency has specifically required or approved such costs.

(3) Costs allowed for business interruption or other similar insurance must exclude coverage of management fees.

(4) Costs of insurance on the lives of trustees, officers, or other employees holding positions of similar responsibilities are allowable only to the extent that the insurance represents additional compensation (see §75.431). The cost of such insurance when the non-Federal entity is identified as the beneficiary is unallowable.

(5) Insurance against defects. Costs of insurance with respect to any costs incurred to correct defects in the non-Federal entity's materials or workmanship are unallowable.

(6) Medical liability (malpractice) insurance. Medical liability insurance is an allowable cost of Federal research programs only to the extent that the Federal research programs involve human subjects or training of participants in research techniques. Medical liability insurance costs must be treated as a direct cost and must be assigned to individual projects based on the manner in which the insurer allocates the risk to the population covered by the insurance.

(c) Actual losses which could have been covered by permissible insurance (through a self-insurance program or otherwise) are unallowable, unless expressly provided for in the Federal award. However, costs incurred because of losses not covered under nominal deductible insurance coverage provided in keeping with sound management practice, and minor losses not covered by insurance, such as spoilage, breakage, and disappearance of small hand tools, which occur in the ordinary course of operations, are allowable.

(d) Contributions to a reserve for certain self-insurance programs including workers' compensation, unemployment compensation, and severance pay are allowable subject to the following provisions:

(1) The type of coverage and the extent of coverage and the rates and premiums would have been allowed had insurance (including reinsurance) been purchased to cover the risks. However, provision for known or reasonably estimated self-insured liabilities, which do not become payable for more than one year after the provision is made, must not exceed the discounted present value of the liability. The rate used for discounting the liability must be determined by giving consideration to such factors as the non-Federal entity's settlement rate for those liabilities and its investment rate of return.

(2) Earnings or investment income on reserves must be credited to those reserves.

(3)(i) Contributions to reserves must be based on sound actuarial principles using historical experience and reasonable assumptions. Reserve levels must be analyzed and updated at least biennially for each major risk being insured and take into account any reinsurance, coinsurance, etc. Reserve levels related to employee-related coverages will normally be limited to the value of claims:

(A) Submitted and adjudicated but not paid;

(B) Submitted but not adjudicated; and

(C) Incurred but not submitted.

(ii) Reserve levels in excess of the amounts based on the above must be identified and justified in the cost allocation plan or indirect cost rate proposal.

(4) Accounting records, actuarial studies, and cost allocations (or billings) must recognize any significant differences due to types of insured risk and losses generated by the various insured activities or agencies of the non-Federal entity. If individual departments or agencies of the non-Federal entity experience significantly different levels of claims for a particular risk, those differences are to be recognized by the use of separate allocations or other techniques resulting in an equitable allocation.

(5) Whenever funds are transferred from a self-insurance reserve to other accounts (e.g., general fund or unrestricted account), refunds must be made to the Federal Government for its share of funds transferred, including earned or imputed interest from the date of transfer and debt interest, if applicable, chargeable in accordance with applicable Federal cognizant agency for indirect cost, claims collection regulations.

(e) Insurance refunds must be credited against insurance costs in the year the refund is received.

(f) Indemnification includes securing the non-Federal entity against liabilities to third persons and other losses not compensated by insurance or otherwise. The Federal Government is obligated to indemnify the non-Federal entity only to the extent expressly provided for in the Federal award, except as provided in paragraph (c) of this section.

§75.448 Intellectual property.

(a) *Patent costs.* (1) The following costs related to securing patents and copyrights are allowable:

(i) Costs of preparing disclosures, reports, and other documents required by the Federal award, and of searching the art to the extent necessary to make such disclosures;

(ii) Costs of preparing documents and any other patent costs in connection with the filing and prosecution of a United States patent application where title or royalty-free license is required by the Federal Government to be conveyed to the Federal Government; and

(iii) General counseling services relating to patent and copyright matters, such as advice on patent and copyright laws, regulations, clauses, and employee intellectual property agreements (See also §75.459).

(2) The following costs related to securing patents and copyrights are unallowable:

(i) Costs of preparing disclosures, reports, and other documents, and of searching the art to make disclosures not required by the Federal award;

(ii) Costs in connection with filing and prosecuting any foreign patent application, or any United States patent application, where the Federal award does not require conveying title or a royalty-free license to the Federal Government.

(b) *Royalties and other costs for use of patents and copyrights.* (1) Royalties on a patent or copyright or amortization of the cost of acquiring by purchase a copyright, patent, or rights thereto, necessary for the proper performance of the Federal award are allowable unless:

(i) The Federal Government already has a license or the right to free use of the patent or copyright.

(ii) The patent or copyright has been adjudicated to be invalid, or has been administratively determined to be invalid.

(iii) The patent or copyright is considered to be unenforceable.

(iv) The patent or copyright is expired.

(2) Special care should be exercised in determining reasonableness where the royalties may have been arrived at as a result of less-than-arm's-length bargaining, such as:

(i) Royalties paid to persons, including corporations, affiliated with the non-Federal entity.

(ii) Royalties paid to unaffiliated parties, including corporations, under an agreement entered into in contemplation that a Federal award would be made.

(iii) Royalties paid under an agreement entered into after a Federal award is made to a non-Federal entity.

(3) In any case involving a patent or copyright formerly owned by the non-Federal entity, the amount of royalty allowed must not exceed the cost which would have been allowed had the non-Federal entity retained title thereto.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3018, Jan. 20, 2016]

§75.449 Interest.

(a) *General.* Costs incurred for interest on borrowed capital, temporary use of endowment funds, or the use of the non-Federal entity's own funds, however represented, are unallowable. Financing costs

(including interest) to acquire, construct, or replace capital assets are allowable, subject to the conditions in this section.

(b)(1) Capital assets is defined as noted in §75.2 *Capital assets*. An asset cost includes (as applicable) acquisition costs, construction costs, and other costs capitalized in accordance with GAAP.

(2) For non-Federal entity fiscal years beginning on or after January 1, 2016, intangible assets include patents and computer software. For software development projects, only interest attributable to the portion of the project costs capitalized in accordance with GAAP is allowable.

(c) *Conditions for all non-Federal entities.* (1) The non-Federal entity uses the capital assets in support of Federal awards;

(2) The allowable asset costs to acquire facilities and equipment are limited to a fair market value available to the non-Federal entity from an unrelated (arm's length) third party.

(3) The non-Federal entity obtains the financing via an arm's-length transaction (that is, a transaction with an unrelated third party); or claims reimbursement of actual interest cost at a rate available via such a transaction.

(4) The non-Federal entity limits claims for Federal reimbursement of interest costs to the least expensive alternative. For example, a capital lease may be determined less costly than purchasing through debt financing, in which case reimbursement must be limited to the amount of interest determined if leasing had been used.

(5) The non-Federal entity expenses or capitalizes allowable interest cost in accordance with GAAP.

(6) Earnings generated by the investment of borrowed funds pending their disbursement for the asset costs are used to offset the current period's allowable interest cost, whether that cost is expensed or capitalized. Earnings subject to being reported to the Federal Internal Revenue Service under arbitrage requirements are excludable.

(7) The following conditions must apply to debt arrangements over \$1 million to purchase or construct facilities, unless the non-Federal entity makes an initial equity contribution to the purchase of 25 percent or more. For this purpose, "initial equity contribution" means the amount or value of contributions made by the non-Federal entity for the acquisition of facilities prior to occupancy.

(i) The non-Federal entity must reduce claims for reimbursement of interest cost by an amount equal to imputed interest earnings on excess cash flow attributable to the portion of the facility used for Federal awards.

(ii) The non-Federal entity must impute interest on excess cash flow as follows:

(A) Annually, the non-Federal entity must prepare a cumulative (from the inception of the project) report of monthly cash inflows and outflows, regardless of the funding source. For this purpose, inflows consist of Federal reimbursement for depreciation, amortization of capitalized construction interest, and annual interest cost. Outflows consist of initial equity contributions, debt principal payments (less the pro-rata share attributable to the cost of land), and interest payments.

(B) To compute monthly cash inflows and outflows, the non-Federal entity must divide the annual amounts determined in step (i) by the number of months in the year (usually 12) that the building is in service.

(C) For any month in which cumulative cash inflows exceed cumulative outflows, interest must be calculated on the excess inflows for that month and be treated as a reduction to allowable interest cost. The rate of interest to be used must be the three-month Treasury bill closing rate as of the last business day of that month.

(8) Interest attributable to a fully depreciated asset is unallowable.

(d) Additional conditions for states, local governments and Indian tribes. For costs to be allowable, the non-Federal entity must have incurred the interest costs for buildings after October 1, 1980, or for land and equipment after September 1, 1995.

(1) The requirement to offset interest earned on borrowed funds against current allowable interest cost (paragraph (c)(5) of this section) also applies to earnings on debt service reserve funds.

(2) The non-Federal entity will negotiate the amount of allowable interest cost related to the acquisition of facilities with asset costs of \$1 million or more, as outlined in paragraph (c)(7) of this section. For this purpose, a non-Federal entity must consider only cash inflows and outflows attributable to that portion of the real property used for Federal awards.

(e) Additional conditions for IHEs. For costs to be allowable, the IHE must have incurred the interest costs after July 1, 1982, in connection with acquisitions of capital assets that occurred after that date.

(f) Additional condition for nonprofit organizations. For costs to be allowable, the nonprofit organization incurred the interest costs after September 29, 1995, in connection with acquisitions of capital assets that occurred after that date.

(g) The interest allowability provisions of this section do not apply to a nonprofit organization subject to "full coverage" under the Cost Accounting Standards (CAS), as defined at 48 CFR 9903.201-2(a). The non-Federal entity's Federal awards are instead subject to CAS 414 (48 CFR 9904.414), and CAS 417 (48 CFR 9904.417).

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3018, Jan. 20, 2016]

§75.450 Lobbying.

(a) The cost of certain influencing activities associated with obtaining grants, contracts, cooperative agreements, or loans is an unallowable cost. Lobbying with respect to certain grants, contracts, cooperative agreements, and loans is governed by relevant statutes, including among others, the provisions of 31 U.S.C. 1352, as well as the common rule, "New Restrictions on Lobbying" published at 55 FR 6736 (February 26, 1990), including definitions, and the Office of Management and Budget "Government-wide Guidance for New Restrictions on Lobbying" and notices published at 54 FR 52306 (December 20, 1989), 55 FR 24540 (June 15, 1990), 57 FR 1772 (January 15, 1992), and 61 FR 1412 (January 19, 1996).

(b) *Executive lobbying costs.* Costs incurred in attempting to improperly influence either directly or indirectly, an employee or officer of the executive branch of the Federal Government to give consideration or to act regarding a Federal award or a regulatory matter are unallowable. Improper influence means any influence that induces or tends to induce a Federal employee or officer to give consideration or to act regarding a Federal award or regulatory matter on any basis other than the merits of the matter.

(c) In addition to the above, the following restrictions are applicable to nonprofit organizations and IHEs:

(1) Costs associated with the following activities are unallowable:

(i) Attempts to influence the outcomes of any Federal, state, or local election, referendum, initiative, or similar procedure, through in-kind or cash contributions, endorsements, publicity, or similar activity;

(ii) Establishing, administering, contributing to, or paying the expenses of a political party, campaign, political action committee, or other organization established for the purpose of influencing the outcomes of elections in the United States;

(iii) Any attempt to influence:

(A) The introduction of Federal or state legislation;

(B) The enactment or modification of any pending Federal or state legislation through communication with any member or employee of the Congress or state legislature (including efforts to influence state or local officials to engage in similar lobbying activity);

(C) The enactment or modification of any pending Federal or state legislation by preparing, distributing, or using publicity or propaganda, or by urging members of the general public, or any segment thereof, to contribute to or participate in any mass demonstration, march, rally, fund raising drive, lobbying campaign or letter writing or telephone campaign; or

(D) Any government official or employee in connection with a decision to sign or veto enrolled legislation;

(iv) Legislative liaison activities, including attendance at legislative sessions or committee hearings, gathering information regarding legislation, and analyzing the effect of legislation, when such activities are carried on in support of or in knowing preparation for an effort to engage in unallowable lobbying.

(2) The following activities are excepted from the coverage of paragraph (c)(1) of this section:

(i) Technical and factual presentations on topics directly related to the performance of a grant, contract, or other agreement (through hearing testimony, statements, or letters to the Congress or a state legislature, or subdivision, member, or cognizant staff member thereof), in response to a documented request (including a Congressional Record notice requesting testimony or statements for the record at a regularly scheduled hearing) made by the non-Federal entity's member of congress, legislative body or a subdivision, or a cognizant staff member thereof, provided such information is readily obtainable and can be readily put in deliverable form, and further provided that costs under this section for travel, lodging or meals are unallowable unless incurred to offer testimony at a regularly scheduled Congressional hearing pursuant to a written request for such presentation made by the Chairman or Ranking Minority Member of the Committee or Subcommittee conducting such hearings;

(ii) Any lobbying made unallowable by paragraph (c)(1)(iii) of this section to influence state legislation in order to directly reduce the cost, or to avoid material impairment of the non-Federal entity's authority to perform the grant, contract, or other agreement; or

(iii) Any activity specifically authorized by statute to be undertaken with funds from the Federal award.

(iv) Any activity excepted from the definitions of "lobbying" or "influencing legislation" by the Internal Revenue Code provisions that require nonprofit organizations to limit their participation in direct and "grass roots" lobbying activities in order to retain their charitable deduction status and avoid punitive excise taxes, I.R.C. sections 501(c)(3), 501(h), 4911(a), including:

(A) Nonpartisan analysis, study, or research reports;

(B) Examinations and discussions of broad social, economic, and similar problems; and

(C) Information provided upon request by a legislator for technical advice and assistance, as defined by IRC sec. 4911(d)(2) and 26 CFR 56.4911-2(c)(1)-(c)(3).

(v) When a non-Federal entity seeks reimbursement for indirect (F&A) costs, total lobbying costs must be separately identified in the indirect (F&A) cost rate proposal, and thereafter treated as other unallowable activity costs in accordance with the procedures of §75.413.

(vi) The non-Federal entity must submit as part of its annual indirect (F&A) cost rate proposal a certification that the requirements and standards of this section have been complied with. (See also §75.415.)

(vii)(A) Time logs, calendars, or similar records are not required to be created for purposes of complying with the record keeping requirements in §75.302 with respect to lobbying costs during any particular calendar month when:

(1) The employee engages in lobbying (as defined in paragraphs (c)(1) and (c)(2) of this section) 25 percent or less of the employee's compensated hours of employment during that calendar month; and

(2) Within the preceding five-year period, the non-Federal entity has not materially misstated allowable or unallowable costs of any nature, including legislative lobbying costs.

(B) When conditions in paragraph (c)(2)(vii)(A)(1) and (2) of this section are met, non-Federal entities are not required to establish records to support the allowability of claimed costs in addition to records already required or maintained. Also, when conditions in paragraphs (c)(2)(vii)(A)(1) and (2) of this section are met, the absence of time logs, calendars, or similar records will not serve as a basis for disallowing costs by contesting estimates of lobbying time spent by employees during a calendar month.

(viii) The HHS awarding agency must establish procedures for resolving in advance, in consultation with OMB, any significant questions or disagreements concerning the interpretation or application of this section. Any such advance resolutions must be binding in any subsequent settlements, audits, or investigations with respect to that grant or contract for purposes of interpretation of this part, provided, however, that this must not be construed to prevent a contractor or non-Federal entity from contesting the lawfulness of such a determination.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3018, Jan. 20, 2016]

§75.451 Losses on other awards or contracts.

Any excess of costs over income under any other award or contract of any nature is unallowable. This includes, but is not limited to, the non-Federal entity's contributed portion by reason of cost-sharing agreements or any under-recoveries through negotiation of flat amounts for indirect (F&A) costs. Also, any excess of costs over authorized funding levels transferred from any award or contract to another award or contract is unallowable. All losses are not allowable indirect (F&A) costs and are required to be included in the appropriate indirect cost rate base for allocation of indirect costs.

§75.452 Maintenance and repair costs.

Costs incurred for utilities, insurance, security, necessary maintenance, janitorial services, repair, or upkeep of buildings and equipment (including Federal property unless otherwise provided for) which

neither add to the permanent value of the property nor appreciably prolong its intended life, but keep it in an efficient operating condition, are allowable. Costs incurred for improvements which add to the permanent value of the buildings and equipment or appreciably prolong their intended life must be treated as capital expenditures (see §75.439). These costs are only allowable to the extent not paid through rental or other agreements.

§75.453 Materials and supplies costs, including costs of computing devices.

(a) Costs incurred for materials, supplies, and fabricated parts necessary to carry out a Federal award are allowable.

(b) Purchased materials and supplies must be charged at their actual prices, net of applicable credits. Withdrawals from general stores or stockrooms must be charged at their actual net cost under any recognized method of pricing inventory withdrawals, consistently applied. Incoming transportation charges are a proper part of materials and supplies costs.

(c) Materials and supplies used for the performance of a Federal award may be charged as direct costs. In the specific case of computing devices, charging as direct costs is allowable for devices that are essential and allocable, but not solely dedicated, to the performance of a Federal award.

(d) Where federally-donated or furnished materials are used in performing the Federal award, such materials will be used without charge.

§75.454 Memberships, subscriptions, and professional activity costs.

(a) Costs of the non-Federal entity's membership in business, technical, and professional organizations are allowable.

(b) Costs of the non-Federal entity's subscriptions to business, professional, and technical periodicals are allowable.

(c) Costs of membership in any civic or community organization are allowable with prior approval by the HHS awarding agency or pass-through entity.

(d) Costs of membership in any country club or social or dining club or organization are unallowable.

(e) Costs of membership in organizations whose primary purpose is lobbying are unallowable. See also §75.450.

§75.455 Organization costs.

Costs such as incorporation fees, brokers' fees, fees to promoters, organizers or management consultants, attorneys, accountants, or investment counselor, whether or not employees of the non-Federal entity in connection with establishment or reorganization of an organization, are unallowable except with prior approval of the HHS awarding agency.

§75.456 Participant support costs.

Participant support costs as defined in §75.2 are allowable with the prior approval of the HHS awarding agency.

§75.457 Plant and security costs.

Necessary and reasonable expenses incurred for protection and security of facilities, personnel, and work products are allowable. Such costs include, but are not limited to, wages and uniforms of personnel engaged in security activities; equipment; barriers; protective (non-military) gear, devices, and equipment; contractual security services; and consultants. Capital expenditures for plant security purposes are subject to §75.439.

§75.458 Pre-award costs.

Pre-award costs are those incurred prior to the effective date of the Federal award directly pursuant to the negotiation and in anticipation of the Federal award where such costs are necessary for efficient and timely performance of the scope of work. Such costs are allowable only to the extent that they would have been allowable if incurred after the date of the Federal award and only with the written approval of the HHS awarding agency.

§75.459 Professional service costs.

(a) Costs of professional and consultant services rendered by persons who are members of a particular profession or possess a special skill, and who are not officers or employees of the non-Federal entity, are allowable, subject to paragraphs (b) and (c) of this section when reasonable in relation to the services rendered and when not contingent upon recovery of the costs from the Federal Government. In addition, legal and related services are limited under §75.435.

(b) In determining the allowability of costs in a particular case, no single factor or any special combination of factors is necessarily determinative. However, the following factors are relevant:

- (1) The nature and scope of the service rendered in relation to the service required.
- (2) The necessity of contracting for the service, considering the non-Federal entity's capability in the particular area.
- (3) The past pattern of such costs, particularly in the years prior to Federal awards.
- (4) The impact of Federal awards on the non-Federal entity's business (*i.e.*, what new problems have arisen).
- (5) Whether the proportion of Federal work to the non-Federal entity's total business is such as to influence the non-Federal entity in favor of incurring the cost, particularly where the services rendered are not of a continuing nature and have little relationship to work under Federal awards.
- (6) Whether the service can be performed more economically by direct employment rather than contracting.
- (7) The qualifications of the individual or concern rendering the service and the customary fees charged, especially on non-federally funded activities.
- (8) Adequacy of the contractual agreement for the service (*e.g.*, description of the service, estimate of time required, rate of compensation, and termination provisions).

(c) In addition to the factors in paragraph (b) of this section, to be allowable, retainer fees must be supported by evidence of bona fide services available or rendered.

§75.460 Proposal costs.

Proposal costs are the costs of preparing bids, proposals, or applications on potential Federal and non-Federal awards or projects, including the development of data necessary to support the non-Federal entity's bids or proposals. Proposal costs of the current accounting period of both successful and unsuccessful bids and proposals normally should be treated as indirect (F&A) costs and allocated currently to all activities of the non-Federal entity. No proposal costs of past accounting periods will be allocable to the current period.

§75.461 Publication and printing costs.

(a) Publication costs for electronic and print media, including distribution, promotion, and general handling are allowable. If these costs are not identifiable with a particular cost objective, they should be allocated as indirect costs to all benefiting activities of the non-Federal entity.

(b) Page charges for professional journal publications are allowable where:

(1) The publications report work supported by the Federal Government; and

(2) The charges are levied impartially on all items published by the journal, whether or not under a Federal award.

(3) The non-Federal entity may charge the Federal award before closeout for the costs of publication or sharing of research results if the costs are not incurred during the period of performance of the Federal award.

(c) The non-Federal entity may charge the Federal award before closeout for the costs of publication as prescribed in paragraphs (a) or (b) of this section or sharing of research results if the costs are not incurred during the period of performance of the Federal award.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3018, Jan. 20, 2016]

§75.462 Rearrangement and reconversion costs.

(a) Costs incurred for ordinary and normal rearrangement and alteration of facilities are allowable as indirect costs. Special arrangements and alterations costs incurred specifically for a Federal award are allowable as a direct cost with the prior approval of the HHS awarding agency or pass-through entity.

(b) Costs incurred in the restoration or rehabilitation of the non-Federal entity's facilities to approximately the same condition existing immediately prior to commencement of Federal awards, less costs related to normal wear and tear, are allowable.

§75.463 Recruiting costs.

(a) Subject to paragraphs (b) and (c) of this section, and provided that the size of the staff recruited and maintained is in keeping with workload requirements, costs of "help wanted" advertising, operating costs of an employment office necessary to secure and maintain an adequate staff, costs of operating an aptitude and educational testing program, travel costs of employees while engaged in recruiting personnel, travel costs of applicants for interviews for prospective employment, and relocation costs incurred incident to recruitment of new employees, are allowable to the extent that such costs are incurred pursuant to the non-Federal entity's standard recruitment program. Where the non-Federal entity uses employment agencies, costs not in excess of standard commercial rates for such services are allowable.

(b) Special emoluments, fringe benefits, and salary allowances incurred to attract professional personnel that do not meet the test of reasonableness or do not conform with the established practices of the non-Federal entity, are unallowable.

(c) Where relocation costs incurred incident to recruitment of a new employee have been funded in whole or in part to a Federal award, and the newly hired employee resigns for reasons within the employee's control within 12 months after hire, the non-Federal entity will be required to refund or credit the Federal share of such relocation costs to the Federal Government. See also §75.464.

(d) Short-term, travel visa costs (as opposed to longer-term, immigration visas) are generally allowable expenses that may be proposed as a direct cost. Since short-term visas are issued for a specific period and purpose, they can be clearly identified as directly connected to work performed on a Federal award. For these costs to be directly charged to a Federal award, they must:

- (1) Be critical and necessary for the conduct of the project;
- (2) Be allowable under the applicable cost principles;
- (3) Be consistent with the non-Federal entity's cost accounting practices and non-Federal entity policy; and
- (4) Meet the definition of "direct cost" as described in the applicable cost principles.

§75.464 Relocation costs of employees.

(a) Relocation costs are costs incident to the permanent change of duty assignment (for an indefinite period or for a stated period of not less than 12 months) of an existing employee or upon recruitment of a new employee. Relocation costs are allowable, subject to the limitations described in paragraphs (b), (c), and (d) of this section, provided that:

- (1) The move is for the benefit of the employer.
- (2) Reimbursement to the employee is in accordance with an established written policy consistently followed by the employer.
- (3) The reimbursement does not exceed the employee's actual (or reasonably estimated) expenses.

(b) Allowable relocation costs for current employees are limited to the following:

- (1) The costs of transportation of the employee, members of his or her immediate family and his household, and personal effects to the new location.
- (2) The costs of finding a new home, such as advance trips by employees and spouses to locate living quarters and temporary lodging during the transition period, up to maximum period of 30 calendar days.
- (3) Closing costs, such as brokerage, legal, and appraisal fees, incident to the disposition of the employee's former home. These costs, together with those described in (4), are limited to 8 per cent of the sales price of the employee's former home.

(4) The continuing costs of ownership (for up to six months) of the vacant former home after the settlement or lease date of the employee's new permanent home, such as maintenance of buildings and grounds (exclusive of fixing-up expenses), utilities, taxes, and property insurance.

(5) Other necessary and reasonable expenses normally incident to relocation, such as the costs of canceling an unexpired lease, transportation of personal property, and purchasing insurance against loss of or damages to personal property. The cost of canceling an unexpired lease is limited to three times the monthly rental.

(c) Allowable relocation costs for new employees are limited to those described in paragraphs (b)(1) and (2) of this section. When relocation costs incurred incident to the recruitment of new employees have been charged to a Federal award and the employee resigns for reasons within the employee's control within 12 months after hire, the non-Federal entity must refund or credit the Federal Government for its share of the cost. However, the costs of travel to an overseas location must be considered travel costs in accordance with §75.474, and not §75.464, for the purpose of this paragraph if dependents are not permitted at the location for any reason and the costs do not include costs of transporting household goods.

(d) The following costs related to relocation are unallowable:

- (1) Fees and other costs associated with acquiring a new home.
- (2) A loss on the sale of a former home.
- (3) Continuing mortgage principal and interest payments on a home being sold.
- (4) Income taxes paid by an employee related to reimbursed relocation costs.

§75.465 Rental costs of real property and equipment.

(a) Subject to the limitations described in paragraphs (b) and (c) of this section, rental costs are allowable to the extent that the rates are reasonable in light of such factors as: Rental costs of comparable property, if any; market conditions in the area; alternatives available; and the type, life expectancy, condition, and value of the property leased. Rental arrangements should be reviewed periodically to determine if circumstances have changed and other options are available.

(b) Rental costs under "sale and lease back" arrangements are allowable only up to the amount that would be allowed had the non-Federal entity continued to own the property. This amount would include expenses such as depreciation, maintenance, taxes, and insurance.

(c) Rental costs under "less-than-arm's-length" leases are allowable only up to the amount as explained in paragraph (b) of this section. For this purpose, a less-than-arm's-length lease is one under which one party to the lease agreement is able to control or substantially influence the actions of the other. Such leases include, but are not limited to those between:

- (1) Divisions of the non-Federal entity;
- (2) The non-Federal entity under common control through common officers, directors, or members;
and
- (3) The non-Federal entity and a director, trustee, officer, or key employee of the non-Federal entity or an immediate family member, either directly or through corporations, trusts, or similar arrangements in

which they hold a controlling interest. For example, the non-Federal entity may establish a separate corporation for the sole purpose of owning property and leasing it back to the non-Federal entity.

(4) Family members include one party with any of the following relationships to another party:

(i) Spouse, and parents thereof;

(ii) Children, and spouses thereof;

(iii) Parents, and spouses thereof;

(iv) Siblings, and spouses thereof;

(v) Grandparents and grandchildren, and spouses thereof;

(vi) Domestic partner and parents thereof, including domestic partners of any individual in 2 through 5 of this definition; and

(vii) Any individual related by blood or affinity whose close association with the employee is the equivalent of a family relationship.

(5) Rental costs under leases which are required to be treated as capital leases under GAAP are allowable only up to the amount (as explained in paragraph (b) of this section) that would be allowed had the non-Federal entity purchased the property on the date the lease agreement was executed. The provisions of GAAP must be used to determine whether a lease is a capital lease. Interest costs related to capital leases are allowable to the extent they meet the criteria in §75.449. Unallowable costs include amounts paid for profit, management fees, and taxes that would not have been incurred had the non-Federal entity purchased the property.

(6) The rental of any property owned by any individuals or entities affiliated with the non-Federal entity, to include commercial or residential real estate, for purposes such as the home office workspace is unallowable.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3018, Jan. 20, 2016]

§75.466 Scholarships and student aid costs.

(a) Costs of scholarships, fellowships, and other programs of student aid at IHEs are allowable only when the purpose of the Federal award is to provide training to selected participants and the charge is approved by the HHS awarding agency. However, tuition remission and other forms of compensation paid as, or in lieu of, wages to students performing necessary work are allowable provided that:

(1) The individual is conducting activities necessary to the Federal award;

(2) Tuition remission and other support are provided in accordance with established policy of the IHE and consistently provided in a like manner to students in return for similar activities conducted under Federal awards as well as other activities; and

(3) During the academic period, the student is enrolled in an advanced degree program at a non-Federal entity or affiliated institution and the activities of the student in relation to the Federal award are related to the degree program;

(4) The tuition or other payments are reasonable compensation for the work performed and are conditioned explicitly upon the performance of necessary work; and

(5) It is the IHE's practice to similarly compensate students under Federal awards as well as other activities.

(b) Charges for tuition remission and other forms of compensation paid to students as, or in lieu of, salaries and wages must be subject to the reporting requirements in §75.430, and must be treated as direct or indirect cost in accordance with the actual work being performed. Tuition remission may be charged on an average rate basis. See also §75.431.

§75.467 Selling and marketing costs.

Costs of selling and marketing any products or services of the non-Federal entity (unless allowed under §75.421) are unallowable, except as direct costs, with prior approval by the HHS awarding agency when necessary for the performance of the Federal award.

§75.468 Specialized service facilities.

(a) The costs of services provided by highly complex or specialized facilities operated by the non-Federal entity, such as computing facilities, wind tunnels, and reactors are allowable, provided the charges for the services meet the conditions of either paragraphs (b) or (c) of this section, and, in addition, take into account any items of income or Federal financing that qualify as applicable credits under §75.406.

(b) The costs of such services, when material, must be charged directly to applicable awards based on actual usage of the services on the basis of a schedule of rates or established methodology that:

(1) Does not discriminate between activities under Federal awards and other activities of the non-Federal entity, including usage by the non-Federal entity for internal purposes, and

(2) Is designed to recover only the aggregate costs of the services. The costs of each service must consist normally of both its direct costs and its allocable share of all indirect (F&A) costs. Rates must be adjusted at least biennially, and must take into consideration over/under applied costs of the previous period(s).

(c) Where the costs incurred for a service are not material, they may be allocated as indirect (F&A) costs.

(d) Under some extraordinary circumstances, where it is in the best interest of the Federal Government and the non-Federal entity to establish alternative costing arrangements, such arrangements may be worked out with the Federal cognizant agency for indirect costs.

§75.469 Student activity costs.

Costs incurred for intramural activities, student publications, student clubs, and other student activities, are unallowable, unless specifically provided for in the Federal award.

§75.470 Taxes (including Value Added Tax).

(a) For states, local governments and Indian tribes:

(1) Taxes that a governmental unit is legally required to pay are allowable, except for self-assessed taxes that disproportionately affect Federal programs or changes in tax policies that disproportionately affect Federal programs.

(2) Gasoline taxes, motor vehicle fees, and other taxes that are in effect user fees for benefits provided to the Federal Government are allowable.

(3) This provision does not restrict the authority of the HHS awarding agency to identify taxes where Federal participation is inappropriate. Where the identification of the amount of unallowable taxes would require an inordinate amount of effort, the cognizant agency for indirect costs may accept a reasonable approximation thereof.

(b) For nonprofit organizations and IHEs:

(1) In general, taxes which the non-Federal entity is required to pay and which are paid or accrued in accordance with GAAP, and payments made to local governments in lieu of taxes which are commensurate with the local government services received are allowable, except for:

(i) Taxes from which exemptions are available to the non-Federal entity directly or which are available to the non-Federal entity based on an exemption afforded the Federal Government and, in the latter case, when the HHS awarding agency makes available the necessary exemption certificates,

(ii) Special assessments on land which represent capital improvements, and

(iii) Federal income taxes.

(2) Any refund of taxes, and any payment to the non-Federal entity of interest thereon, which were allowed as Federal award costs, will be credited either as a cost reduction or cash refund, as appropriate, to the Federal Government. However, any interest actually paid or credited to a non-Federal entity incident to a refund of tax, interest, and penalty will be paid or credited to the Federal Government only to the extent that such interest accrued over the period during which the non-Federal entity has been reimbursed by the Federal Government for the taxes, interest, and penalties.

(c) Value Added Tax (VAT) Foreign taxes charged for the purchase of goods or services that a non-Federal entity is legally required to pay in country is an allowable expense under Federal awards. Foreign tax refunds or applicable credits under Federal awards refer to receipts, or reduction of expenditures, which operate to offset or reduce expense items that are allocable to Federal awards as direct or indirect costs. To the extent that such credits accrued or received by the non-Federal entity relate to allowable cost, these costs must be credited to the HHS awarding agency either as costs or cash refunds. If the costs are credited back to the Federal award, the non-Federal entity may reduce the Federal share of costs by the amount of the foreign tax reimbursement, or where Federal award has not expired, use the foreign government tax refund for approved activities under the Federal award with prior approval of the HHS awarding agency.

§75.471 Termination costs.

Termination of a Federal award generally gives rise to the incurrence of costs, or the need for special treatment of costs, which would not have arisen had the Federal award not been terminated. Cost principles covering these items are set forth in this section. They are to be used in conjunction with the other provisions of this part in termination situations.

(a) The cost of items reasonably usable on the non-Federal entity's other work must not be allowable unless the non-Federal entity submits evidence that it would not retain such items at cost

without sustaining a loss. In deciding whether such items are reasonably usable on other work of the non-Federal entity, the HHS awarding agency should consider the non-Federal entity's plans and orders for current and scheduled activity. Contemporaneous purchases of common items by the non-Federal entity must be regarded as evidence that such items are reasonably usable on the non-Federal entity's other work. Any acceptance of common items as allocable to the terminated portion of the Federal award must be limited to the extent that the quantities of such items on hand, in transit, and on order are in excess of the reasonable quantitative requirements of other work.

(b) If in a particular case, despite all reasonable efforts by the non-Federal entity, certain costs cannot be discontinued immediately after the effective date of termination, such costs are generally allowable within the limitations set forth in this part, except that any such costs continuing after termination due to the negligent or willful failure of the non-Federal entity to discontinue such costs must be unallowable.

(c) Loss of useful value of special tooling, machinery, and equipment is generally allowable if:

(1) Such special tooling, special machinery, or equipment is not reasonably capable of use in the other work of the non-Federal entity,

(2) The interest of the Federal Government is protected by transfer of title or by other means deemed appropriate by the HHS awarding agency (see also §75.320(d)), and

(3) The loss of useful value for any one terminated Federal award is limited to that portion of the acquisition cost which bears the same ratio to the total acquisition cost as the terminated portion of the Federal award bears to the entire terminated Federal award and other Federal awards for which the special tooling, machinery, or equipment was acquired.

(d) Rental costs under unexpired leases are generally allowable where clearly shown to have been reasonably necessary for the performance of the terminated Federal award less the residual value of such leases, if:

(1) The amount of such rental claimed does not exceed the reasonable use value of the property leased for the period of the Federal award and such further period as may be reasonable, and

(2) The non-Federal entity makes all reasonable efforts to terminate, assign, settle, or otherwise reduce the cost of such lease. There also may be included the cost of alterations of such leased property, provided such alterations were necessary for the performance of the Federal award, and of reasonable restoration required by the provisions of the lease.

(e) Settlement expenses including the following are generally allowable:

(1) Accounting, legal, clerical, and similar costs reasonably necessary for:

(i) The preparation and presentation to the Federal awarding agency of settlement claims and supporting data with respect to the terminated portion of the Federal award, unless the termination is for cause (see subpart D of this part, §§75.371 through 75.375); and

(ii) The termination and settlement of subawards.

(2) Reasonable costs for the storage, transportation, protection, and disposition of property provided by the Federal Government or acquired or produced for the Federal award.

(f) Claims under subawards, including the allocable portion of claims which are common to the Federal award and to other work of the non-Federal entity, are generally allowable. An appropriate share of the non-Federal entity's indirect costs may be allocated to the amount of settlements with contractors and/or subrecipients, provided that the amount allocated is otherwise consistent with the basic guidelines contained in §75.414. The indirect costs so allocated must exclude the same and similar costs claimed directly or indirectly as settlement expenses.

§75.472 Training and education costs.

The cost of training and education provided for employee development is allowable.

§75.473 Transportation costs.

Costs incurred for freight, express, cartage, postage, and other transportation services relating either to goods purchased, in process, or delivered, are allowable. When such costs can readily be identified with the items involved, they may be charged directly as transportation costs or added to the cost of such items. Where identification with the materials received cannot readily be made, inbound transportation cost may be charged to the appropriate indirect (F&A) cost accounts if the non-Federal entity follows a consistent, equitable procedure in this respect. Outbound freight, if reimbursable under the terms and conditions of the Federal award, should be treated as a direct cost.

§75.474 Travel costs.

(a) *General.* Travel costs are the expenses for transportation, lodging, subsistence, and related items incurred by employees who are in travel status on official business of the non-Federal entity. Such costs may be charged on an actual cost basis, on a per diem or mileage basis in lieu of actual costs incurred, or on a combination of the two, provided the method used is applied to an entire trip and not to selected days of the trip, and results in charges consistent with those normally allowed in like circumstances in the non-Federal entity's non-federally-funded activities and in accordance with non-Federal entity's written travel reimbursement policies. Notwithstanding the provisions of §75.444, travel costs of officials covered by that section are allowable with the prior written approval of the Federal awarding agency or pass-through entity when they are specifically related to the Federal award.

(b) *Lodging and subsistence.* Costs incurred by employees and officers for travel, including costs of lodging, other subsistence, and incidental expenses, must be considered reasonable and otherwise allowable only to the extent such costs do not exceed charges normally allowed by the non-Federal entity in its regular operations as the result of the non-Federal entity's written travel policy. In addition, if these costs are charged directly to the Federal award documentation must justify that:

- (1) Participation of the individual is necessary to the Federal award; and
- (2) The costs are reasonable and consistent with non-Federal entity's established travel policy.

(c)(1) Temporary dependent care costs (as dependent is defined in 26 U.S.C. 152) above and beyond regular dependent care that directly results from travel to conferences is allowable provided that:

- (i) The costs are a direct result of the individual's travel for the Federal award;
- (ii) The costs are consistent with the non-Federal entity's documented travel policy for all entity travel; and
- (iii) Are only temporary during the travel period.

(2) Travel costs for dependents are unallowable, except for travel of duration of six months or more with prior approval of the HHS awarding agency. See also §75.432.

(d) In the absence of an acceptable, written non-Federal entity policy regarding travel costs, the rates and amounts established under 5 U.S.C. 5701-11 ("Travel and Subsistence Expenses: Mileage Allowance"), or by the Administrator of General Services, or by the President (or his or her designee) pursuant to any provisions of such subchapter must apply to travel under Federal awards (48 CFR 31.205-46(a)).

(e) *Commercial air travel.* (1) Airfare costs in excess of the basic least expensive unrestricted accommodations class offered by commercial airlines are unallowable except when such accommodations would:

(i) Require circuitous routing;

(ii) Require travel during unreasonable hours;

(iii) Excessively prolong travel;

(iv) Result in additional costs that would offset the transportation savings; or

(v) Offer accommodations not reasonably adequate for the traveler's medical needs. The non-Federal entity must justify and document these conditions on a case-by-case basis in order for the use of first-class or business-class airfare to be allowable in such cases.

(2) Unless a pattern of avoidance is detected, the Federal Government will generally not question a non-Federal entity's determinations that customary standard airfare or other discount airfare is unavailable for specific trips if the non-Federal entity can demonstrate that such airfare was not available in the specific case.

(f) *Air travel by other than commercial carrier.* Costs of travel by non-Federal entity-owned, -leased, or -chartered aircraft include the cost of lease, charter, operation (including personnel costs), maintenance, depreciation, insurance, and other related costs. The portion of such costs that exceeds the cost of airfare as provided for in paragraph (d) of this section, is unallowable.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3018, Jan. 20, 2016]

§75.475 Trustees.

Travel and subsistence costs of trustees (or directors) at IHEs and nonprofit organizations are allowable. See also §75.474.

HHS SELECTED ITEMS OF COST

§75.476 Independent research and development costs.

Independent research and development is research and development which is conducted by an organization, and which is not sponsored by Federal or non-Federal awards, contracts, or other agreements. Independent research and development shall be allocated its proportionate share of indirect costs on the same basis as the allocation of indirect costs to sponsored research and development. The cost of independent research and development, including their proportionate share of indirect costs, are unallowable.

Subpart F—Audit Requirements

GENERAL

§75.500 Purpose.

This part sets forth standards for obtaining consistency and uniformity among HHS agencies for the audit of non-Federal entities expending Federal awards.

AUDITS

§75.501 Audit requirements.

(a) *Audit required.* A non-Federal entity that expends \$750,000 or more during the non-Federal entity's fiscal year in Federal awards must have a single or program-specific audit conducted for that year in accordance with the provisions of this part.

(b) *Single audit.* A non-Federal entity that expends \$750,000 or more during the non-Federal entity's fiscal year in Federal awards must have a single audit conducted in accordance with §75.514 except when it elects to have a program-specific audit conducted in accordance with paragraph (c) of this section.

(c) *Program-specific audit election.* When an auditee expends Federal awards under only one Federal program (excluding R&D) and the Federal program's statutes, regulations, or the terms and conditions of the Federal award do not require a financial statement audit of the auditee, the auditee may elect to have a program-specific audit conducted in accordance with §75.507. A program-specific audit may not be elected for R&D unless all of the Federal awards expended were received from the same Federal agency, or the same Federal agency and the same pass-through entity, and that Federal agency, or pass-through entity in the case of a subrecipient, approves in advance a program-specific audit.

(d) *Exemption when Federal awards expended are less than \$750,000.* A non-Federal entity that expends less than \$750,000 during the non-Federal entity's fiscal year in Federal awards is exempt from Federal audit requirements for that year, except as noted in §75.503, but records must be available for review or audit by appropriate officials of the Federal agency, pass-through entity, and Government Accountability Office (GAO).

(e) *Federally Funded Research and Development Centers (FFRDC).* Management of an auditee that owns or operates a FFRDC may elect to treat the FFRDC as a separate entity for purposes of this part.

(f) *Subrecipients and contractors.* An auditee may simultaneously be a recipient, a subrecipient, and a contractor. Federal awards expended as a recipient or a subrecipient are subject to audit under this part. The payments received for goods or services provided as a contractor are not Federal awards. Section 75.351 sets forth the considerations in determining whether payments constitute a Federal award or a payment for goods or services provided as a contractor.

(g) *Compliance responsibility for contractors.* In most cases, the auditee's compliance responsibility for contractors is only to ensure that the procurement, receipt, and payment for goods and services comply with Federal statutes, regulations, and the terms and conditions of Federal awards. Federal award compliance requirements normally do not pass through to contractors. However, the auditee is responsible for ensuring compliance for procurement transactions which are structured such that the contractor is responsible for program compliance or the contractor's records must be reviewed to determine program compliance. Also, when these procurement transactions relate to a major program,

the scope of the audit must include determining whether these transactions are in compliance with Federal statutes, regulations, and the terms and conditions of Federal awards.

(h) *For-profit subrecipient.* Since this part does not apply to for-profit subrecipients, the pass-through entity is responsible for establishing requirements, as necessary, to ensure compliance by for-profit subrecipients. The agreement with the for-profit subrecipient must describe applicable compliance requirements and the for-profit subrecipient's compliance responsibility. Methods to ensure compliance for Federal awards made to for-profit subrecipients may include pre-award audits, monitoring during the agreement, and post-award audits. See also §75.352.

(i) Recipients and subrecipients that are commercial organizations (including for-profit hospitals) have two options regarding audits:

(1) A financial related audit (as defined in the Government Auditing Standards, GPO Stock #020-000-00-265-4) of a particular award in accordance with Government Auditing Standards, in those cases where the recipient receives awards under only one HHS program; or, if awards are received under multiple HHS programs, a financial related audit of all HHS awards in accordance with Government Auditing Standards; or

(2) An audit that meets the requirements contained in this subpart.

(j) Commercial organizations that receive annual HHS awards totaling less than \$750,000 are exempt from requirements for a non-Federal audit for that year, but records must be available for review by appropriate officials of Federal agencies.

(k) See also §75.216.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3018, Jan. 20, 2016]

§75.502 Basis for determining Federal awards expended.

(a) *Determining Federal awards expended.* The determination of when a Federal award is expended must be based on when the activity related to the Federal award occurs. Generally, the activity pertains to events that require the non-Federal entity to comply with Federal statutes, regulations, and the terms and conditions of Federal awards, such as: expenditure/expense transactions associated with awards including grants, cost-reimbursement contracts under the FAR, compacts with Indian Tribes, cooperative agreements, and direct appropriations; the disbursement of funds to subrecipients; the use of loan proceeds under loan and loan guarantee programs; the receipt of property; the receipt of surplus property; the receipt or use of program income; the distribution or use of food commodities; the disbursement of amounts entitling the non-Federal entity to an interest subsidy; and the period when insurance is in force.

(b) *Loan and loan guarantees (loans).* Since the Federal Government is at risk for loans until the debt is repaid, the following guidelines must be used to calculate the value of Federal awards expended under loan programs, except as noted in paragraphs (c) and (d) of this section:

(1) Value of new loans made or received during the audit period; plus

(2) Beginning of the audit period balance of loans from previous years for which the Federal Government imposes continuing compliance requirements; plus

(3) Any interest subsidy, cash, or administrative cost allowance received.

(c) *Loan and loan guarantees (loans) at IHEs.* When loans are made to students of an IHE but the IHE does not make the loans, then only the value of loans made during the audit period must be considered Federal awards expended in that audit period. The balance of loans for previous audit periods is not included as Federal awards expended because the lender accounts for the prior balances.

(d) *Prior loan and loan guarantees (loans).* Loans, the proceeds of which were received and expended in prior years, are not considered Federal awards expended under this part when the Federal statutes, regulations, and the terms and conditions of Federal awards pertaining to such loans impose no continuing compliance requirements other than to repay the loans.

(e) *Endowment funds.* The cumulative balance of Federal awards for endowment funds that are federally restricted are considered Federal awards expended in each audit period in which the funds are still restricted.

(f) *Free rent.* Free rent received by itself is not considered a Federal award expended under this part. However, free rent received as part of a Federal award to carry out a Federal program must be included in determining Federal awards expended and subject to audit under this part.

(g) *Valuing non-cash assistance.* Federal non-cash assistance, such as free rent, food commodities, donated property, or donated surplus property, must be valued at fair market value at the time of receipt or the assessed value provided by the HHS agency.

(h) *Medicare.* Medicare payments to a non-Federal entity for providing patient care services to Medicare-eligible individuals are not considered Federal awards expended under this part.

(i) *Medicaid.* Medicaid payments to a subrecipient for providing patient care services to Medicaid-eligible individuals are not considered Federal awards expended under this part unless a state requires the funds to be treated as Federal awards expended because reimbursement is on a cost-reimbursement basis.

(j) *Certain loans provided by the National Credit Union Administration.* For purposes of this part, loans made from the National Credit Union Share Insurance Fund and the Central Liquidity Facility that are funded by contributions from insured non-Federal entities are not considered Federal awards expended.

§75.503 Relation to other audit requirements.

(a) An audit conducted in accordance with this part must be in lieu of any financial audit of Federal awards which a non-Federal entity is required to undergo under any other Federal statute or regulation. To the extent that such audit provides a Federal agency with the information it requires to carry out its responsibilities under Federal statute or regulation, a Federal agency must rely upon and use that information.

(b) Notwithstanding paragraph (a) of this section, a Federal agency, Inspector General, or GAO may conduct or arrange for additional audits which are necessary to carry out its responsibilities under Federal statute or regulation. The provisions of this part do not authorize any non-Federal entity to constrain, in any manner, such Federal agency from carrying out or arranging for such additional audits, except that the Federal agency must plan such audits to not be duplicative of other audits of Federal awards. Prior to commencing such an audit, the Federal agency or pass-through entity must review the FAC for recent audits submitted by the non-Federal entity, and to the extent such audits meet a Federal agency or pass-through entity's needs, the Federal agency or pass-through entity must rely upon and use such audits. Any additional audits must be planned and performed in such a way as to build upon work performed, including the audit documentation, sampling, and testing already performed, by other auditors.

(c) The provisions of this part do not limit the authority of Federal agencies to conduct, or arrange for the conduct of, audits and evaluations of Federal awards, nor limit the authority of any Federal agency Inspector General or other Federal official. For example, requirements that may be applicable under the FAR or CAS and the terms and conditions of a cost-reimbursement contract may include additional applicable audits to be conducted or arranged for by Federal agencies.

(d) Federal agency to pay for additional audits. A Federal agency that conducts or arranges for additional audits must, consistent with other applicable Federal statutes and regulations, arrange for funding the full cost of such additional audits.

(e) Request for a program to be audited as a major program. An HHS awarding agency may request that an auditee have a particular Federal program audited as a major program in lieu of the HHS awarding agency conducting or arranging for the additional audits. To allow for planning, such requests should be made at least 180 calendar days prior to the end of the fiscal year to be audited. The auditee, after consultation with its auditor, should promptly respond to such a request by informing the HHS awarding agency whether the program would otherwise be audited as a major program using the risk-based audit approach described in §75.518 and, if not, the estimated incremental cost. The HHS awarding agency must then promptly confirm to the auditee whether it wants the program audited as a major program. If the program is to be audited as a major program based upon this HHS awarding agency request, and the HHS awarding agency agrees to pay the full incremental costs, then the auditee must have the program audited as a major program. A pass-through entity may use the provisions of this paragraph for a subrecipient.

§75.504 Frequency of audits.

Except for the provisions for biennial audits provided in paragraphs (a) and (b) of this section, audits required by this part must be performed annually. Any biennial audit must cover both years within the biennial period.

(a) A state, local government, or Indian tribe that is required by constitution or statute, in effect on January 1, 1987, to undergo its audits less frequently than annually, is permitted to undergo its audits pursuant to this part biennially. This requirement must still be in effect for the biennial period.

(b) Any nonprofit organization that had biennial audits for all biennial periods ending between July 1, 1992, and January 1, 1995, is permitted to undergo its audits pursuant to this part biennially.

§75.505 Sanctions.

In cases of continued inability or unwillingness to have an audit conducted in accordance with this part, Federal agencies and pass-through entities must take appropriate action as provided in §75.371.

§75.506 Audit costs.

See §75.425.

§75.507 Program-specific audits.

(a) *Program-specific audit guide available.* In many cases, a program-specific audit guide will be available to provide specific guidance to the auditor with respect to internal controls, compliance requirements, suggested audit procedures, and audit reporting requirements. A listing of current program-specific audit guides can be found in the compliance supplement beginning with the 2014 supplement including HHS awarding agency contact information and a Web site where a copy of the guide can be

obtained. When a current program-specific audit guide is available, the auditor must follow GAGAS and the guide when performing a program-specific audit.

(b) *Program-specific audit guide not available.* (1) When a current program-specific audit guide is not available, the auditee and auditor must have basically the same responsibilities for the Federal program as they would have for an audit of a major program in a single audit.

(2) The auditee must prepare the financial statement(s) for the Federal program that includes, at a minimum, a schedule of expenditures of Federal awards for the program and notes that describe the significant accounting policies used in preparing the schedule, a summary schedule of prior audit findings consistent with the requirements of §75.511(b), and a corrective action plan consistent with the requirements of §75.511(c).

(3) The auditor must:

(i) Perform an audit of the financial statement(s) for the Federal program in accordance with GAGAS;

(ii) Obtain an understanding of internal controls and perform tests of internal controls over the Federal program consistent with the requirements of §75.514(c) for a major program;

(iii) Perform procedures to determine whether the auditee has complied with Federal statutes, regulations, and the terms and conditions of Federal awards that could have a direct and material effect on the Federal program consistent with the requirements of §75.514(d) for a major program;

(iv) Follow up on prior audit findings, perform procedures to assess the reasonableness of the summary schedule of prior audit findings prepared by the auditee in accordance with the requirements of §75.511, and report, as a current year audit finding, when the auditor concludes that the summary schedule of prior audit findings materially misrepresents the status of any prior audit finding; and

(v) Report any audit findings consistent with the requirements of §75.516.

(4) The auditor's report(s) may be in the form of either combined or separate reports and may be organized differently from the manner presented in this section. The auditor's report(s) must state that the audit was conducted in accordance with this part and include the following:

(i) An opinion (or disclaimer of opinion) as to whether the financial statement(s) of the Federal program is presented fairly in all material respects in accordance with the stated accounting policies;

(ii) A report on internal control related to the Federal program, which must describe the scope of testing of internal control and the results of the tests;

(iii) A report on compliance which includes an opinion (or disclaimer of opinion) as to whether the auditee complied with laws, regulations, and the terms and conditions of Federal awards which could have a direct and material effect on the Federal program; and

(iv) A schedule of findings and questioned costs for the Federal program that includes a summary of the auditor's results relative to the Federal program in a format consistent with §75.515(d)(1) and findings and questioned costs consistent with the requirements of §75.515(d)(3).

(c) *Report submission for program-specific audits.* (1) The audit must be completed and the reporting required by paragraph (c)(2) or (c)(3) of this section submitted within the earlier of 30 calendar days after receipt of the auditor's report(s), or nine months after the end of the audit period, unless a

different period is specified in a program-specific audit guide. Unless restricted by Federal law or regulation, the auditee must make report copies available for public inspection. Auditees and auditors must ensure that their respective parts of the reporting package do not include protected personally identifiable information.

(2) When a program-specific audit guide is available, the auditee must electronically submit to the FAC the data collection form prepared in accordance with §75.512(b), as applicable to a program-specific audit, and the reporting required by the program-specific audit guide.

(3) When a program-specific audit guide is not available, the reporting package for a program-specific audit must consist of the financial statement(s) of the Federal program, a summary schedule of prior audit findings, and a corrective action plan as described in paragraph (b)(2) of this section, and the auditor's report(s) described in paragraph (b)(4) of this section. The data collection form prepared in accordance with §75.512(b), as applicable to a program-specific audit, and one copy of this reporting package must be electronically submitted to the FAC.

(d) *Other sections of this part may apply.* Program-specific audits are subject to:

(1) §75.500 through §75.503(d);

(2) §75.504 through §75.506;

(3) §75.508 through §75.509;

(4) §75.511;

(5) §75.512(e) through (h);

(6) §75.513;

(7) §75.516 through §75.517;

(8) §75.521, and

(9) Other referenced provisions of this part unless contrary to the provisions of this section, a program-specific audit guide, or program statutes and regulations.

AUDITEES

§75.508 Auditee responsibilities.

The auditee must:

(a) Procure or otherwise arrange for the audit required by this part in accordance with §75.509, and ensure it is properly performed and submitted when due in accordance with §75.512.

(b) Prepare appropriate financial statements, including the schedule of expenditures of Federal awards in accordance with §75.510.

(c) Promptly follow up and take corrective action on audit findings, including preparation of a summary schedule of prior audit findings and a corrective action plan in accordance with §75.511(b) and §75.511(c), respectively.

(d) Provide the auditor with access to personnel, accounts, books, records, supporting documentation, and other information as needed for the auditor to perform the audit required by this part.

§75.509 Auditor selection.

(a) *Auditor procurement.* In procuring audit services, the auditee must follow the procurement standards prescribed by the Procurement Standards in §§75.326 through 75.335 of subpart D of this part or the FAR (48 CFR part 42), as applicable. When procuring audit services, the objective is to obtain high-quality audits. In requesting proposals for audit services, the objectives and scope of the audit must be made clear and the non-Federal entity must request a copy of the audit organization's peer review report which the auditor is required to provide under GAGAS. Factors to be considered in evaluating each proposal for audit services include the responsiveness to the request for proposal, relevant experience, availability of staff with professional qualifications and technical abilities, the results of peer and external quality control reviews, and price. Whenever possible, the auditee must make positive efforts to utilize small businesses, minority-owned firms, and women's business enterprises, in procuring audit services as stated in §75.330, or the FAR (48 CFR part 42), as applicable.

(b) *Restriction on auditor preparing indirect cost proposals.* An auditor who prepares the indirect cost proposal or cost allocation plan may not also be selected to perform the audit required by this part when the indirect costs recovered by the auditee during the prior year exceeded \$1 million. This restriction applies to the base year used in the preparation of the indirect cost proposal or cost allocation plan and any subsequent years in which the resulting indirect cost agreement or cost allocation plan is used to recover costs.

(c) *Use of Federal auditors.* Federal auditors may perform all or part of the work required under this part if they comply fully with the requirements of this part.

§75.510 Financial statements.

(a) *Financial statements.* The auditee must prepare financial statements that reflect its financial position, results of operations or changes in net assets, and, where appropriate, cash flows for the fiscal year audited. The financial statements must be for the same organizational unit and fiscal year that is chosen to meet the requirements of this part. However, non-Federal entity-wide financial statements may also include departments, agencies, and other organizational units that have separate audits in accordance with §75.514(a) and prepare separate financial statements.

(b) *Schedule of expenditures of Federal awards.* The auditee must also prepare a schedule of expenditures of Federal awards for the period covered by the auditee's financial statements which must include the total Federal awards expended as determined in accordance with §75.502. While not required, the auditee may choose to provide information requested by HHS awarding agencies and pass-through entities to make the schedule easier to use. For example, when a Federal program has multiple Federal award years, the auditee may list the amount of Federal awards expended for each Federal award year separately. At a minimum, the schedule must:

(1) List individual Federal programs by Federal agency. For a cluster of programs, provide the cluster name, list individual Federal programs within the cluster of programs, and provide the applicable Federal agency name. For R&D, total Federal awards expended must be shown either by individual Federal award or by Federal agency and major subdivision within the Federal agency. For example, the National Institutes of Health is a major subdivision in the Department of Health and Human Services.

(2) For Federal awards received as a subrecipient, the name of the pass-through entity and identifying number assigned by the pass-through entity must be included.

(3) Provide total Federal awards expended for each individual Federal program and the CFDA number or other identifying number when the CFDA information is not available. For a cluster of programs also provide the total for the cluster.

(4) Include the total amount provided to subrecipients from each Federal program.

(5) For loan or loan guarantee programs described in §75.502(b), identify in the notes to the schedule the balances outstanding at the end of the audit period. This is in addition to including the total Federal awards expended for loan or loan guarantee programs in the schedule.

(6) Include notes that describe that significant accounting policies used in preparing the schedule, and note whether or not the auditee elected to use the 10% de minimis cost rate as covered in §75.414.

§75.511 Audit findings follow-up.

(a) *General.* The auditee is responsible for follow-up and corrective action on all audit findings. As part of this responsibility, the auditee must prepare a summary schedule of prior audit findings. The auditee must also prepare a corrective action plan for current year audit findings. The summary schedule of prior audit findings and the corrective action plan must include the reference numbers the auditor assigns to audit findings under §75.516(c). Since the summary schedule may include audit findings from multiple years, it must include the fiscal year in which the finding initially occurred. The corrective action plan and summary schedule of prior audit findings must include findings relating to the financial statements which are required to be reported in accordance with GAGAS.

(b) *Summary schedule of prior audit findings.* The summary schedule of prior audit findings must report the status of all audit findings included in the prior audit's schedule of findings and questioned costs. The summary schedule must also include audit findings reported in the prior audit's summary schedule of prior audit findings except audit findings listed as corrected in accordance with paragraph (b)(1) of this section, or no longer valid or not warranting further action in accordance with paragraph (b)(3) of this section.

(1) When audit findings were fully corrected, the summary schedule need only list the audit findings and state that corrective action was taken.

(2) When audit findings were not corrected or were only partially corrected, the summary schedule must describe the reasons for the finding's recurrence and planned corrective action, and any partial corrective action taken. When corrective action taken is significantly different from corrective action previously reported in a corrective action plan or in the Federal agency's or pass-through entity's management decision, the summary schedule must provide an explanation.

(3) When the auditee believes the audit findings are no longer valid or do not warrant further action, the reasons for this position must be described in the summary schedule. A valid reason for considering an audit finding as not warranting further action is that all of the following have occurred:

(i) Two years have passed since the audit report in which the finding occurred was submitted to the FAC;

(ii) The Federal agency or pass-through entity is not currently following up with the auditee on the audit finding; and

(iii) A management decision was not issued.

(c) *Corrective action plan.* At the completion of the audit, the auditee must prepare, in a document separate from the auditor's findings described in §75.516, a corrective action plan to address each audit finding included in the current year auditor's reports. The corrective action plan must provide the name(s) of the contact person(s) responsible for corrective action, the corrective action planned, and the anticipated completion date. If the auditee does not agree with the audit findings or believes corrective action is not required, then the corrective action plan must include an explanation and specific reasons.

§75.512 Report submission.

(a) *General.* (1) The audit must be completed and the data collection form described in paragraph (b) of this section and reporting package described in paragraph (c) of this section must be submitted within the earlier of 30 calendar days after receipt of the auditor's report(s), or nine months after the end of the audit period. If the due date falls on a Saturday, Sunday, or Federal holiday, the reporting package is due the next business day.

(2) Unless restricted by Federal statutes or regulations, the auditee must make copies available for public inspection. Auditees and auditors must ensure that their respective parts of the reporting package do not include protected personally identifiable information.

(b) *Data collection.* The FAC is the repository of record for subpart F of this part reporting packages and the data collection form. All Federal agencies, pass-through entities and others interested in a reporting package and data collection form must obtain it by accessing the FAC.

(1) The auditee must submit required data elements described in appendix X to part 75, which state whether the audit was completed in accordance with this part and provides information about the auditee, its Federal programs, and the results of the audit. The data must include information available from the audit required by this part that is necessary for Federal agencies to use the audit to ensure integrity for Federal programs. The data elements and format must be approved by OMB, available from the FAC, and include collections of information from the reporting package described in paragraph (c) of this section. A senior level representative of the auditee (*e.g.*, state controller, director of finance, chief executive officer, or chief financial officer) must sign a statement to be included as part of the data collection that says that the auditee complied with the requirements of this part, the data were prepared in accordance with this part (and the instructions accompanying the form), the reporting package does not include protected personally identifiable information, the information included in its entirety is accurate and complete, and that the FAC is authorized to make the reporting package and the form publicly available on a Web site.

(2) *Exception for Indian Tribes and Tribal Organizations.* An auditee that is an Indian tribe or a tribal organization (as defined in the Indian Self-Determination, Education and Assistance Act (ISDEAA), 25 U.S.C. 450b(l)) may opt not to authorize the FAC to make the reporting package publicly available on a Web site, by excluding the authorization for the FAC publication in the statement described in paragraph (b)(1) of this section. If this option is exercised, the auditee becomes responsible for submitting the reporting package directly to any pass-through entities through which it has received a Federal award and to pass-through entities for which the summary schedule of prior audit findings reported the status of any findings related to Federal awards that the pass-through entity provided. Unless restricted by Federal statute or regulation, if the auditee opts not to authorize publication, it must make copies of the reporting package available for public inspection.

(3) Using the information included in the reporting package described in paragraph (c) of this section, the auditor must complete the applicable data elements of the data collection form. The auditor must sign a statement to be included as part of the data collection form that indicates, at a minimum, the source of the information included in the form, the auditor's responsibility for the information, that the form is not a substitute for the reporting package described in paragraph (c) of this section, and that the content of the form is limited to the collection of information prescribed by OMB.

(c) *Reporting package.* The reporting package must include the:

(1) Financial statements and schedule of expenditures of Federal awards discussed in §75.510(a) and (b), respectively;

(2) Summary schedule of prior audit findings discussed in §75.511(b);

(3) Auditor's report(s) discussed in §75.515; and

(4) Corrective action plan discussed in §75.511(c).

(d) *Submission to FAC.* The auditee must electronically submit to the FAC the data collection form described in paragraph (b) of this section and the reporting package described in paragraph (c) of this section.

(e) *Requests for management letters issued by the auditor.* In response to requests by a Federal agency or pass-through entity, auditees must submit a copy of any management letters issued by the auditor.

(f) *Report retention requirements.* Auditees must keep one copy of the data collection form described in paragraph (b) of this section and one copy of the reporting package described in paragraph (c) of this section on file for three years from the date of submission to the FAC.

(g) *FAC responsibilities.* The FAC must make available the reporting packages received in accordance with paragraph (c) of this section and §75.507(c) to the public, except for Indian tribes exercising the option in (b)(2) of this section, and maintain a data base of completed audits, provide appropriate information to Federal agencies, and follow up with known auditees that have not submitted the required data collection forms and reporting packages.

(h) *Electronic filing.* Nothing in this part must preclude electronic submissions to the FAC in such manner as may be approved by OMB.

FEDERAL AGENCIES

§75.513 Responsibilities.

(a)(1) Cognizant agency for audit responsibilities. A non-Federal entity expending more than \$50 million a year in Federal awards must have a cognizant agency for audit. The designated cognizant agency for audit must be the Federal awarding agency that provides the predominant amount of direct funding to a non-Federal entity unless OMB designates a specific cognizant agency for audit.

(2) To provide for continuity of cognizance, the determination of the predominant amount of direct funding must be based upon direct Federal awards expended in the non-Federal entity's fiscal years ending in 2009, 2014, 2019 and every fifth year thereafter. For example, audit cognizance for periods ending in 2011 through 2015 will be determined based on Federal awards expended in 2009.

(3) Notwithstanding the manner in which audit cognizance is determined, a Federal awarding agency with cognizance for an auditee may reassign cognizance to another Federal awarding agency that provides substantial funding and agrees to be the cognizant agency for audit. Within 30 calendar days after any reassignment, both the old and the new cognizant agency for audit must provide notice of the change to the FAC, the auditee, and, if known, the auditor. The cognizant agency for audit must:

(i) Provide technical audit advice and liaison assistance to auditees and auditors.

(ii) Obtain or conduct quality control reviews on selected audits made by non-Federal auditors, and provide the results to other interested organizations. Cooperate and provide support to the Federal agency designated by OMB to lead a government-wide project to determine the quality of single audits by providing a statistically reliable estimate of the extent that single audits conform to applicable requirements, standards, and procedures; and to make recommendations to address noted audit quality issues, including recommendations for any changes to applicable requirements, standards and procedures indicated by the results of the project. This government-wide audit quality project must be performed once every 6 years beginning in 2018 or at such other interval as determined by OMB, and the results must be public.

(iii) Promptly inform other affected Federal agencies and appropriate Federal law enforcement officials of any direct reporting by the auditee or its auditor required by GAGAS or statutes and regulations.

(iv) Advise the community of independent auditors of any noteworthy or important factual trends related to the quality of audits stemming from quality control reviews. Significant problems or quality issues consistently identified through quality control reviews of audit reports must be referred to appropriate state licensing agencies and professional bodies.

(v) Advise the auditor, HHS awarding agencies, and, where appropriate, the auditee of any deficiencies found in the audits when the deficiencies require corrective action by the auditor. When advised of deficiencies, the auditee must work with the auditor to take corrective action. If corrective action is not taken, the cognizant agency for audit must notify the auditor, the auditee, and applicable HHS awarding agencies and pass-through entities of the facts and make recommendations for follow-up action. Major inadequacies or repetitive substandard performance by auditors must be referred to appropriate state licensing agencies and professional bodies for disciplinary action.

(vi) Coordinate, to the extent practical, audits or reviews made by or for Federal agencies that are in addition to the audits made pursuant to this part, so that the additional audits or reviews build upon rather than duplicate audits performed in accordance with this part.

(vii) Coordinate a management decision for cross-cutting audit findings (as defined in §75.2 *Cross-cutting audit finding*) that affect the Federal programs of more than one agency when requested by any Federal awarding agency whose awards are included in the audit finding of the auditee.

(viii) Coordinate the audit work and reporting responsibilities among auditors to achieve the most cost-effective audit.

(ix) Provide advice to auditees as to how to handle changes in fiscal years.

(b) Oversight agency for audit responsibilities. An auditee who does not have a designated cognizant agency for audit will be under the general oversight of the Federal agency determined in accordance with §75.2 *Oversight agency for audit*. A Federal agency with oversight for an auditee may reassign oversight to another Federal agency that agrees to be the oversight agency for audit. Within 30 calendar days after any reassignment, both the old and the new oversight agency for audit must provide notice of the change to the FAC, the auditee, and, if known, the auditor. The oversight agency for audit:

(1) Must provide technical advice to auditees and auditors as requested.

(2) May assume all or some of the responsibilities normally performed by a cognizant agency for audit.

(c) HHS awarding agency responsibilities. The HHS awarding agency must perform the following for the Federal awards it makes (See also the requirements of §75.210):

(1) Ensure that audits are completed and reports are received in a timely manner and in accordance with the requirements of this part.

(2) Provide technical advice and counsel to auditees and auditors as requested.

(3) Follow-up on audit findings to ensure that the recipient takes appropriate and timely corrective action. As part of audit follow-up, the HHS awarding agency must:

(i) Issue a management decision as prescribed in §75.521;

(ii) Monitor the recipient taking appropriate and timely corrective action;

(iii) Use cooperative audit resolution mechanisms (see §75.2 *Cooperative audit resolution*) to improve Federal program outcomes through better audit resolution, follow-up, and corrective action; and

(iv) Develop a baseline, metrics, and targets to track, over time, the effectiveness of the Federal agency's process to follow-up on audit findings and on the effectiveness of Single Audits in improving non-Federal entity accountability and their use by HHS awarding agencies in making award decisions.

(4) Provide OMB annual updates to the compliance supplement and work with OMB to ensure that the compliance supplement focuses the auditor to test the compliance requirements most likely to cause improper payments, fraud, waste, abuse or generate audit finding for which the Federal awarding agency will take sanctions.

(5) Provide OMB with the name of a single audit accountable official from among the senior policy officials of the HHS awarding agency who must be:

(i) Responsible for ensuring that the agency fulfills all the requirements of paragraph (c) of this section and effectively uses the single audit process to reduce improper payments and improve Federal program outcomes.

(ii) Held accountable to improve the effectiveness of the single audit process based upon metrics as described in paragraph (c)(3)(iv) of this section.

(iii) Responsible for designating the Federal agency's key management single audit liaison.

(6) Provide OMB with the name of a key management single audit liaison who must:

(i) Serve as the Federal awarding agency's management point of contact for the single audit process both within and outside the Federal Government.

(ii) Promote interagency coordination, consistency, and sharing in areas such as coordinating audit follow-up; identifying higher-risk non-Federal entities; providing input on single audit and follow-up policy; enhancing the utility of the FAC; and studying ways to use single audit results to improve Federal award accountability and best practices.

(iii) Oversee training for the HHS awarding agency's program management personnel related to the single audit process.

(iv) Promote the HHS awarding agency's use of cooperative audit resolution mechanisms.

(v) Coordinate the HHS awarding agency's activities to ensure appropriate and timely follow-up and corrective action on audit findings.

(vi) Organize the Federal cognizant agency for audit's follow-up on cross-cutting audit findings that affect the Federal programs of more than one HHS awarding agency.

(vii) Ensure the HHS awarding agency provides annual updates of the compliance supplement to OMB.

(viii) Support the HHS awarding agency's single audit accountable official's mission.

AUDITORS

§75.514 Scope of audit.

(a) *General.* The audit must be conducted in accordance with GAGAS. The audit must cover the entire operations of the auditee, or, at the option of the auditee, such audit must include a series of audits that cover departments, agencies, and other organizational units that expended or otherwise administered Federal awards during such audit period, provided that each such audit must encompass the financial statements and schedule of expenditures of Federal awards for each such department, agency, and other organizational unit, which must be considered to be a non-Federal entity. The financial statements and schedule of expenditures of Federal awards must be for the same audit period.

(b) *Financial statements.* The auditor must determine whether the financial statements of the auditee are presented fairly in all material respects in accordance with generally accepted accounting principles. The auditor must also determine whether the schedule of expenditures of Federal awards is stated fairly in all material respects in relation to the auditee's financial statements as a whole.

(c) *Internal control.* (1) The compliance supplement provides guidance on internal controls over Federal programs based upon the guidance in Standards for Internal Control in the Federal Government issued by the Comptroller General of the United States and the Internal Control—Integrated Framework, issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

(2) In addition to the requirements of GAGAS, the auditor must perform procedures to obtain an understanding of internal control over Federal programs sufficient to plan the audit to support a low assessed level of control risk of noncompliance for major programs.

(3) Except as provided in paragraph (c)(4) of this section, the auditor must:

(i) Plan the testing of internal control over compliance for major programs to support a low assessed level of control risk for the assertions relevant to the compliance requirements for each major program; and

(ii) Perform testing of internal control as planned in paragraph (c)(3)(i) of this section.

(4) When internal control over some or all of the compliance requirements for a major program are likely to be ineffective in preventing or detecting noncompliance, the planning and performing of testing described in paragraph (c)(3) of this section are not required for those compliance requirements. However, the auditor must report a significant deficiency or material weakness in accordance with §75.516, assess the related control risk at the maximum, and consider whether additional compliance tests are required because of ineffective internal control.

(d) *Compliance.* (1) In addition to the requirements of GAGAS, the auditor must determine whether the auditee has complied with Federal statutes, regulations, and the terms and conditions of Federal awards that may have a direct and material effect on each of its major programs.

(2) The principal compliance requirements applicable to most Federal programs and the compliance requirements of the largest Federal programs are included in the compliance supplement.

(3) For the compliance requirements related to Federal programs contained in the compliance supplement, an audit of these compliance requirements will meet the requirements of this part. Where there have been changes to the compliance requirements and the changes are not reflected in the compliance supplement, the auditor must determine the current compliance requirements and modify the audit procedures accordingly. For those Federal programs not covered in the compliance supplement, the auditor must follow the compliance supplement's guidance for programs not included in the supplement.

(4) The compliance testing must include tests of transactions and such other auditing procedures necessary to provide the auditor sufficient appropriate audit evidence to support an opinion on compliance.

(e) *Audit follow-up.* The auditor must follow-up on prior audit findings, perform procedures to assess the reasonableness of the summary schedule of prior audit findings prepared by the auditee in accordance with §75.511(b), and report, as a current year audit finding, when the auditor concludes that the summary schedule of prior audit findings materially misrepresents the status of any prior audit finding. The auditor must perform audit follow-up procedures regardless of whether a prior audit finding relates to a major program in the current year.

(f) *Data collection form.* As required in §75.512(b)(3), the auditor must complete and sign specified sections of the data collection form.

§75.515 Audit reporting.

The auditor's report(s) may be in the form of either combined or separate reports and may be organized differently from the manner presented in this section. The auditor's report(s) must state that the audit was conducted in accordance with this part and include the following:

(a) An opinion (or disclaimer of opinion) as to whether the financial statements are presented fairly in all material respects in accordance with generally accepted accounting principles and an opinion (or disclaimer of opinion) as to whether the schedule of expenditures of Federal awards is fairly stated in all material respects in relation to the financial statements as a whole.

(b) A report on internal control over financial reporting and compliance with provisions of laws, regulations, contracts, and award agreements, noncompliance with which could have a material effect on the financial statements. This report must describe the scope of testing of internal control and compliance and the results of the tests, and, where applicable, it will refer to the separate schedule of findings and questioned costs described in paragraph (d) of this section.

(c) A report on compliance for each major program and a report on internal control over compliance. This report must describe the scope of testing of internal control over compliance, include an opinion or disclaimer of opinion as to whether the auditee complied with Federal statutes, regulations, and the terms and conditions of Federal awards which could have a direct and material effect on each major program and refer to the separate schedule of findings and questioned costs described in paragraph (d) of this section.

(d) A schedule of findings and questioned costs which must include the following three components:

(1) A summary of the auditor's results, which must include:

(i) The type of report the auditor issued on whether the financial statements audited were prepared in accordance with GAAP (*i.e.*, unmodified opinion, qualified opinion, adverse opinion, or disclaimer of opinion);

(ii) Where applicable, a statement about whether significant deficiencies or material weaknesses in internal control were disclosed by the audit of the financial statements;

(iii) A statement as to whether the audit disclosed any noncompliance that is material to the financial statements of the auditee;

(iv) Where applicable, a statement about whether significant deficiencies or material weaknesses in internal control over major programs were disclosed by the audit;

(v) The type of report the auditor issued on compliance for major programs (*i.e.*, unmodified opinion, qualified opinion, adverse opinion, or disclaimer of opinion);

(vi) A statement as to whether the audit disclosed any audit findings that the auditor is required to report under §75.516(a);

(vii) An identification of major programs by listing each individual major program; however in the case of a cluster of programs only the cluster name as shown on the Schedule of Expenditures of Federal Awards is required;

(viii) The dollar threshold used to distinguish between Type A and Type B programs, as described in §75.518(b)(1), or (b)(3) when a recalculation of the Type A threshold is required for large loan or loan guarantees; and

(ix) A statement as to whether the auditee qualified as a low-risk auditee under §75.520.

(2) Findings relating to the financial statements which are required to be reported in accordance with GAGAS.

(3) Findings and questioned costs for Federal awards which must include audit findings as defined in §75.516(a).

(i) Audit findings (*e.g.*, internal control findings, compliance findings, questioned costs, or fraud) that relate to the same issue must be presented as a single audit finding. Where practical, audit findings should be organized by Federal agency or pass-through entity.

(ii) Audit findings that relate to both the financial statements and Federal awards, as reported under paragraphs (d)(2) and (d)(3) of this section, respectively, must be reported in both sections of the schedule. However, the reporting in one section of the schedule may be in summary form with a reference to a detailed reporting in the other section of the schedule.

(e) Nothing in this part precludes combining of the audit reporting required by this section with the reporting required by §75.512(b) when allowed by GAGAS and appendix X to part 75.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3018, Jan. 20, 2016]

§75.516 Audit findings.

(a) *Audit findings reported.* The auditor must report the following as audit findings in a schedule of findings and questioned costs:

(1) Significant deficiencies and material weaknesses in internal control over major programs and significant instances of abuse relating to major programs. The auditor's determination of whether a deficiency in internal control is a significant deficiency or material weakness for the purpose of reporting an audit finding is in relation to a type of compliance requirement for a major program identified in the Compliance Supplement.

(2) Material noncompliance with the provisions of Federal statutes, regulations, or the terms and conditions of Federal awards related to a major program. The auditor's determination of whether a noncompliance with the provisions of Federal statutes, regulations, or the terms and conditions of Federal awards is material for the purpose of reporting an audit finding is in relation to a type of compliance requirement for a major program identified in the compliance supplement.

(3) Known questioned costs that are greater than \$25,000 for a type of compliance requirement for a major program. Known questioned costs are those specifically identified by the auditor. In evaluating the effect of questioned costs on the opinion on compliance, the auditor considers the best estimate of total costs questioned (likely questioned costs), not just the questioned costs specifically identified (known questioned costs). The auditor must also report known questioned costs when likely questioned costs are greater than \$25,000 for a type of compliance requirement for a major program. In reporting questioned costs, the auditor must include information to provide proper perspective for judging the prevalence and consequences of the questioned costs.

(4) Known questioned costs that are greater than \$25,000 for a Federal program which is not audited as a major program. Except for audit follow-up, the auditor is not required under this part to perform audit procedures for such a Federal program; therefore, the auditor will normally not find questioned costs for a program that is not audited as a major program. However, if the auditor does become aware of questioned costs for a Federal program that is not audited as a major program (e.g., as part of audit follow-up or other audit procedures) and the known questioned costs are greater than \$25,000, then the auditor must report this as an audit finding.

(5) The circumstances concerning why the auditor's report on compliance for each major program is other than an unmodified opinion, unless such circumstances are otherwise reported as audit findings in the schedule of findings and questioned costs for Federal awards.

(6) Known or likely fraud affecting a Federal award, unless such fraud is otherwise reported as an audit finding in the schedule of findings and questioned costs for Federal awards. This paragraph does not require the auditor to report publicly information which could compromise investigative or legal proceedings or to make an additional reporting when the auditor confirms that the fraud was reported outside the auditor's reports under the direct reporting requirements of GAGAS.

(7) Instances where the results of audit follow-up procedures disclosed that the summary schedule of prior audit findings prepared by the auditee in accordance with §75.511(b) materially misrepresents the status of any prior audit finding.

(b) *Audit finding detail and clarity.* Audit findings must be presented in sufficient detail and clarity for the auditee to prepare a corrective action plan and take corrective action, and for Federal agencies and pass-through entities to arrive at a management decision. The following specific information must be included, as applicable, in audit findings:

(1) Federal program and specific Federal award identification including the CFDA title and number, Federal award identification number and year, name of Federal agency, and name of the applicable pass-through entity. When information, such as the CFDA title and number or Federal award identification

number, is not available, the auditor must provide the best information available to describe the Federal award.

(2) The criteria or specific requirement upon which the audit finding is based, including the Federal statutes, regulations, or the terms and conditions of the Federal awards. Criteria generally identify the required or desired state or expectation with respect to the program or operation. Criteria provide a context for evaluating evidence and understanding findings.

(3) The condition found, including facts that support the deficiency identified in the audit finding.

(4) A statement of cause that identifies the reason or explanation for the condition or the factors responsible for the difference between the situation that exists (condition) and the required or desired state (criteria), which may also serve as a basis for recommendations for corrective action.

(5) The possible asserted effect to provide sufficient information to the auditee and Federal agency, or pass-through entity in the case of a subrecipient, to permit them to determine the cause and effect to facilitate prompt and proper corrective action. A statement of the effect or potential effect should provide a clear, logical link to establish the impact or potential impact of the difference between the condition and the criteria.

(6) Identification of questioned costs and how they were computed. Known questioned costs must be identified by applicable CFDA number(s) and applicable Federal award identification number(s).

(7) Information to provide proper perspective for judging the prevalence and consequences of the audit findings, such as whether the audit findings represent an isolated instance or a systemic problem. Where appropriate, instances identified must be related to the universe and the number of cases examined and be quantified in terms of dollar value. The auditor should report whether the sampling was a statistically valid sample.

(8) Identification of whether the audit finding was a repeat of a finding in the immediately prior audit and if so any applicable prior year audit finding numbers.

(9) Recommendations to prevent future occurrences of the deficiency identified in the audit finding.

(10) Views of responsible officials of the auditee.

(c) *Reference numbers.* Each audit finding in the schedule of findings and questioned costs must include a reference number in the format meeting the requirements of the data collection form submission required by §75.512(b) to allow for easy referencing of the audit findings during follow-up.

§75.517 Audit documentation.

(a) *Retention of audit documentation.* The auditor must retain audit documentation and reports for a minimum of three years after the date of issuance of the auditor's report(s) to the auditee, unless the auditor is notified in writing by the cognizant agency for audit, oversight agency for audit, cognizant agency for indirect costs, or pass-through entity to extend the retention period. When the auditor is aware that the Federal agency, pass-through entity, or auditee is contesting an audit finding, the auditor must contact the parties contesting the audit finding for guidance prior to destruction of the audit documentation and reports.

(b) *Access to audit documentation.* Audit documentation must be made available upon request to the cognizant or oversight agency for audit or its designee, cognizant agency for indirect cost, a Federal agency, or GAO at the completion of the audit, as part of a quality review, to resolve audit findings, or to

carry out oversight responsibilities consistent with the purposes of this part. Access to audit documentation includes the right of Federal agencies to obtain copies of audit documentation, as is reasonable and necessary.

§75.518 Major program determination.

(a) *General.* The auditor must use a risk-based approach to determine which Federal programs are major programs. This risk-based approach must include consideration of: Current and prior audit experience, oversight by Federal agencies and pass-through entities, and the inherent risk of the Federal this program. The process in paragraphs (b) through (h) of this section must be followed.

(b) *Step one.* (1) The auditor must identify the larger Federal programs, which must be labeled Type A programs. Type A programs are defined as Federal programs with Federal awards expended during the audit period exceeding the levels outlined in the table in this paragraph (b)(1):

Total Federal awards expended	Type A/B threshold
(i) Equal to or exceed \$750,000 but less than or equal to \$25 million	\$750,000.
(ii) Exceed \$25 million but less than or equal to \$100 million	Total Federal awards expended times .03.
(iii) Exceed \$100 million but less than or equal to \$1 billion	\$3 million.
(iv) Exceed \$1 billion but less than or equal to \$10 billion	Total Federal awards expended times .003.
(v) Exceed \$10 billion but less than or equal to \$20 billion	\$30 million.
(vi) Exceed \$20 billion	Total Federal awards expended times .0015.

(2) Federal programs not labeled Type A under paragraph (b)(1) of this section must be labeled Type B programs.

(3) The inclusion of large loan and loan guarantees (loans) must not result in the exclusion of other programs as Type A programs. When a Federal program providing loans exceeds four times the largest non-loan program it is considered a large loan program, and the auditor must consider this Federal program as a Type A program and exclude its values in determining other Type A programs. This recalculation of the Type A program is performed after removing the total of all large loan programs. For the purposes of this paragraph a program is only considered to be a Federal program providing loans if the value of Federal awards expended for loans within the program comprises fifty percent or more of the total Federal awards expended for the program. A cluster of programs is treated as one program and the value of Federal awards expended under a loan program is determined as described in §75.502.

(4) For biennial audits permitted under §75.504, the determination of Type A and Type B programs must be based upon the Federal awards expended during the two-year period.

(c) *Step two.* (1) The auditor must identify Type A programs which are low-risk. In making this determination, the auditor must consider whether the requirements in §75.519(c), the results of audit follow-up, or any changes in personnel or systems affecting the program indicate significantly increased

risk and preclude the program from being low risk. For a Type A program to be considered low-risk, it must have been audited as a major program in at least one of the two most recent audit periods (in the most recent audit period in the case of a biennial audit), and, in the most recent audit period, the program must have not had:

(i) Internal control deficiencies which were identified as material weaknesses in the auditor's report on internal control for major programs as required under §75.515(c);

(ii) A modified opinion on the program in the auditor's report on major programs as required under §75.515(c); or

(iii) Known or likely questioned costs that exceed five percent of the total Federal awards expended for the program.

(2) Notwithstanding paragraph (c)(1) of this section, OMB may approve an HHS awarding agency's request that a Type A program may not be considered low risk for a certain recipient. For example, it may be necessary for a large Type A program to be audited as a major program each year at a particular recipient to allow the HHS awarding agency to comply with 31 U.S.C. 3515. The HHS awarding agency must notify the recipient and, if known, the auditor of OMB's approval at least 180 calendar days prior to the end of the fiscal year to be audited.

(d) *Step three.* (1) The auditor must identify Type B programs which are high-risk using professional judgment and the criteria in §75.519. However, the auditor is not required to identify more high-risk Type B programs than at least one fourth the number of low-risk Type A programs identified as low-risk under Step 2 (paragraph (c) of this section). Except for known material weakness in internal control or compliance problems as discussed in §75.519(b)(1), (b)(2), and (c)(1), a single criteria in risk would seldom cause a Type B program to be considered high-risk. When identifying which Type B programs to risk assess, the auditor is encouraged to use an approach which provides an opportunity for different high-risk Type B programs to be audited as major over a period of time.

(2) The auditor is not expected to perform risk assessments on relatively small Federal programs. Therefore, the auditor is only required to perform risk assessments on Type B programs that exceed twenty-five percent (0.25) of the Type A threshold determined in Step 1 (paragraph (b) of this section).

(e) *Step four.* At a minimum, the auditor must audit all of the following as major programs:

(1) All Type A programs not identified as low risk under step two (paragraph (c)(1) of this section).

(2) All Type B programs identified as high-risk under step three (paragraph (d) of this section).

(3) Such additional programs as may be necessary to comply with the percentage of coverage rule discussed in paragraph (f) of this section. This may require the auditor to audit more programs as major programs than the number of Type A programs.

(f) *Percentage of coverage rule.* If the auditee meets the criteria in §75.520, the auditor need only audit the major programs identified in Step 4 (paragraph (e)(1) and (2) of this section) and such additional Federal programs with Federal awards expended that, in aggregate, all major programs encompass at least 20 percent (0.20) of total Federal awards expended. Otherwise, the auditor must audit the major programs identified in Step 4 (paragraphs (e)(1) and (2) of this section) and such additional Federal programs with Federal awards expended that, in aggregate, all major programs encompass at least 40 percent (0.40) of total Federal awards expended.

(g) *Documentation of risk.* The auditor must include in the audit documentation the risk analysis process used in determining major programs.

(h) *Auditor's judgment.* When the major program determination was performed and documented in accordance with this subpart, the auditor's judgment in applying the risk-based approach to determine major programs must be presumed correct. Challenges by Federal agencies and pass-through entities must only be for clearly improper use of the requirements in this part. However, Federal agencies and pass-through entities may provide auditors guidance about the risk of a particular Federal program and the auditor must consider this guidance in determining major programs in audits not yet completed.

§75.519 Criteria for Federal program risk.

(a) *General.* The auditor's determination should be based on an overall evaluation of the risk of noncompliance occurring that could be material to the Federal program. The auditor must consider criteria, such as described in paragraphs (b), (c), and (d) of this section, to identify risk in Federal programs. Also, as part of the risk analysis, the auditor may wish to discuss a particular Federal program with auditee management and the Federal agency or pass-through entity.

(b) *Current and prior audit experience.* (1) Weaknesses in internal control over Federal programs would indicate higher risk. Consideration should be given to the control environment over Federal programs and such factors as the expectation of management's adherence to Federal statutes, regulations, and the terms and conditions of Federal awards and the competence and experience of personnel who administer the Federal programs.

(i) A Federal program administered under multiple internal control structures may have higher risk. When assessing risk in a large single audit, the auditor must consider whether weaknesses are isolated in a single operating unit (e.g., one college campus) or pervasive throughout the entity.

(ii) When significant parts of a Federal program are passed through to subrecipients, a weak system for monitoring subrecipients would indicate higher risk.

(2) Prior audit findings would indicate higher risk, particularly when the situations identified in the audit findings could have a significant impact on a Federal program or have not been corrected.

(3) Federal programs not recently audited as major programs may be of higher risk than Federal programs recently audited as major programs without audit findings.

(c) *Oversight exercised by Federal agencies and pass-through entities.* (1) Oversight exercised by Federal agencies or pass-through entities could be used to assess risk. For example, recent monitoring or other reviews performed by an oversight entity that disclosed no significant problems would indicate lower risk, whereas monitoring that disclosed significant problems would indicate higher risk.

(2) Federal agencies, with the concurrence of OMB, may identify Federal programs that are higher risk. OMB will provide this identification in the compliance supplement.

(d) *Inherent risk of the Federal program.* (1) The nature of a Federal program may indicate risk. Consideration should be given to the complexity of the program and the extent to which the Federal program contracts for goods and services. For example, Federal programs that disburse funds through third party contracts or have eligibility criteria may be of higher risk. Federal programs primarily involving staff payroll costs may have high risk for noncompliance with requirements of §75.430, but otherwise be at low risk.

(2) The phase of a Federal program in its life cycle at the Federal agency may indicate risk. For example, a new Federal program with new or interim regulations may have higher risk than an established program with time-tested regulations. Also, significant changes in Federal programs, statutes, regulations, or the terms and conditions of Federal awards may increase risk.

(3) The phase of a Federal program in its life cycle at the auditee may indicate risk. For example, during the first and last years that an auditee participates in a Federal program, the risk may be higher due to start-up or closeout of program activities and staff.

(4) Type B programs with larger Federal awards expended would be of higher risk than programs with substantially smaller Federal awards expended.

§75.520 Criteria for a low-risk auditee.

An auditee that meets all of the following conditions for each of the preceding two audit periods must qualify as a low-risk auditee and be eligible for reduced audit coverage in accordance with §75.518.

(a) Single audits were performed on an annual basis in accordance with the provisions of this subpart, including submitting the data collection form and the reporting package to the FAC within the timeframe specified in §75.512. A non-Federal entity that has biennial audits does not qualify as a low-risk auditee.

(b) The auditor's opinion on whether the financial statements were prepared in accordance with GAAP, or a basis of accounting required by state law, and the auditor's opinion on the schedule of expenditures of Federal awards were unmodified.

(c) There were no deficiencies in internal control which were identified as material weaknesses under the requirements of GAGAS.

(d) The auditor did not report a substantial doubt about the auditee's ability to continue as a going concern.

(e) None of the Federal programs had audit findings from any of the following in either of the preceding two audit periods in which they were classified as Type A programs:

(1) Internal control deficiencies that were identified as material weaknesses in the auditor's report on internal control for major programs as required under §75.515(c);

(2) A modified opinion on a major program in the auditor's report on major programs as required under §75.515(c); or

(3) Known or likely questioned costs that exceeded five percent of the total Federal awards expended for a Type A program during the audit period.

MANAGEMENT DECISIONS

§75.521 Management decision.

(a) *General.* The management decision must clearly state whether or not the audit finding is sustained, the reasons for the decision, and the expected auditee action to repay disallowed costs, make financial adjustments, or take other action. If the auditee has not completed corrective action, a timetable for follow-up should be given. Prior to issuing the management decision, the Federal agency or pass-through entity may request additional information or documentation from the auditee, including a request

for auditor assurance related to the documentation, as a way of mitigating disallowed costs. The management decision should describe any appeal process available to the auditee. While not required, the Federal agency or pass-through entity may also issue a management decision on findings relating to the financial statements which are required to be reported in accordance with GAGAS.

(b) *Federal agency.* As provided in §75.513(a)(3)(vii), the cognizant agency for audit must be responsible for coordinating a management decision for audit findings that affect the programs of more than one Federal agency. As provided in §75.513(c)(3), a Federal awarding agency is responsible for issuing a management decision for findings that relate to Federal awards it makes to non-Federal entities.

(c) *Pass-through entity.* As provided in §75.352(d), the pass-through entity must be responsible for issuing a management decision for audit findings that relate to Federal awards it makes to subrecipients.

(d) *Time requirements.* The HHS awarding agency or pass-through entity responsible for issuing a management decision must do so within six months of acceptance of the audit report by the FAC. The auditee must initiate and proceed with corrective action as rapidly as possible and corrective action should begin no later than upon receipt of the audit report.

(e) *Reference numbers.* Management decisions must include the reference numbers the auditor assigned to each audit finding in accordance with §75.516(c).

Appendix I to Part 75—Full Text of Notice of Funding Opportunity

The full text of the notice of funding opportunity is organized in sections. The required format outlined in this appendix indicates immediately following the title of each section whether that section is required in every announcement or is an HHS awarding agency option. The format is designed so that similar types of information will appear in the same sections in announcements of different Federal funding opportunities. Toward that end, there is text in each of the following sections to describe the types of information that an HHS awarding agency would include in that section of an actual announcement.

An HHS awarding agency that wishes to include information that the format does not specifically discuss may address that subject in whatever section(s) is most appropriate. For example, if an HHS awarding agency chooses to address performance goals in the announcement, it might do so in the funding opportunity description, the application content, or the reporting requirements.

Similarly, when this format calls for a type of information to be in a particular section, an HHS awarding agency wishing to address that subject in other sections may elect to repeat the information in those sections or use cross references between the sections (there should be hyperlinks for cross-references in any electronic versions of the announcement). For example, an HHS awarding agency may want to include in Section A information about the types of non-Federal entities who are eligible to apply. The format specifies a standard location for that information in Section C.1 but that does not preclude repeating the information in Section I or creating a cross reference between Sections A and C.1, as long as a potential applicant can find the information quickly and easily from the standard location.

The sections of the full text of the announcement are described in the following paragraphs.

A. Program Description—Required

This section contains the full program description of the funding opportunity. It may be as long as needed to adequately communicate to potential applicants the areas in which funding may be provided. It describes the HHS awarding agency's funding priorities or the technical or focus areas in which the HHS awarding agency intends to provide assistance. As appropriate, it may include any program history (e.g., whether this is a new program or a new or changed area of program emphasis). This section may

communicate indicators of successful projects (e.g., if the program encourages collaborative efforts) and may include examples of projects that have been funded previously. This section also may include other information the HHS awarding agency deems necessary, and must at a minimum include citations for authorizing statutes and regulations for the funding opportunity.

B. Federal Award Information—Required

This section provides sufficient information to help an applicant make an informed decision about whether to submit a proposal. Relevant information could include the total amount of funding that the HHS awarding agency expects to award through the announcement; the anticipated number of Federal awards; the expected amounts of individual Federal awards (which may be a range); the amount of funding per Federal award, on average, experienced in previous years; and the anticipated start dates and periods of performance for new Federal awards. This section also should address whether applications for renewal or supplementation of existing projects are eligible to compete with applications for new Federal awards.

This section also must indicate the type(s) of assistance instrument (e.g., grant, cooperative agreement) that may be awarded if applications are successful. If cooperative agreements may be awarded, this section either should describe the “substantial involvement” that the HHS awarding agency expects to have or should reference where the potential applicant can find that information (e.g., in the funding opportunity description in section A. or Federal award administration information in Section D. If procurement contracts also may be awarded, this must be stated.

C. Eligibility Information

This section addresses the considerations or factors that determine applicant or application eligibility. This includes the eligibility of particular types of applicant organizations, any factors affecting the eligibility of the principal investigator or project director, and any criteria that make particular projects ineligible. HHS agencies should make clear whether an applicant’s failure to meet an eligibility criterion by the time of an application deadline will result in the HHS awarding agency returning the application without review or, even though an application may be reviewed, will preclude the HHS awarding agency from making a Federal award. Key elements to be addressed are:

1. *Eligible Applicants—Required.* Announcements must clearly identify the types of entities that are eligible to apply. If there are no restrictions on eligibility, this section may simply indicate that all potential applicants are eligible. If there are restrictions on eligibility, it is important to be clear about the specific types of entities that are eligible, not just the types that are ineligible. For example, if the program is limited to nonprofit organizations subject to 26 U.S.C. 501(c)(3) of the tax code (26 U.S.C. 501(c)(3)), the announcement should say so. Similarly, it is better to state explicitly that Native American tribal organizations are eligible than to assume that they can unambiguously infer that from a statement that nonprofit organizations may apply. Eligibility also can be expressed by exception, (e.g., open to all types of domestic applicants other than individuals). This section should refer to any portion of Section D. specifying documentation that must be submitted to support an eligibility determination (e.g., proof of 501(c)(3) status as determined by the Internal Revenue Service or an authorizing tribal resolution). To the extent that any funding restriction in Section D.6 could affect the eligibility of an applicant or project, the announcement must either restate that restriction in this section or provide a cross-reference to its description in Section D.6.

2. *Cost Sharing or Matching—Required.* Announcements must state whether there is required cost sharing, matching, or cost participation without which an application would be ineligible (if cost sharing is not required, the announcement must explicitly say so). Required cost sharing may be a certain percentage or amount, or may be in the form of contributions of specified items or activities (e.g., provision of equipment). It is important that the announcement be clear about any restrictions on the types of cost (e.g., in-kind contributions) that are acceptable as cost sharing. Cost sharing as an eligibility

criterion includes requirements based in statute or regulation, as described in §75.306. This section should refer to the appropriate portion(s) of section D. stating any pre-award requirements for submission of letters or other documentation to verify commitments to meet cost-sharing requirements if a Federal award is made.

3. *Other—Required, if applicable.* If there are other eligibility criteria (*i.e.*, criteria that have the effect of making an application or project ineligible for Federal awards, whether referred to as “responsiveness” criteria, “go-no go” criteria, “threshold” criteria, or in other ways), must be clearly stated and must include a reference to the regulation of requirement that describes the restriction, as applicable. For example, if entities that have been found to be in violation of a particular Federal statute are ineligible, it is important to say so. This section must also state any limit on the number of applications an applicant may submit under the announcement and make clear whether the limitation is on the submitting organization, individual investigator/program director, or both. This section should also address any eligibility criteria for beneficiaries or for program participants other than Federal award recipients.

D. Application and Submission Information

1. *Address to Request Application Package—Required.* Potential applicants must be told how to get application forms, kits, or other materials needed to apply (if this announcement contains everything needed, this section need only say so). An Internet address where the materials can be accessed is acceptable. However, since high-speed Internet access is not yet universally available for downloading documents, and applicants may have additional accessibility requirements, there also should be a way for potential applicants to request paper copies of materials, such as a U.S. Postal Service mailing address, telephone or FAX number, Telephone Device for the Deaf (TDD), Text Telephone (TTY) number, and/or Federal Information Relay Service (FIRS) number.

2. *Content and Form of Application Submission—Required.* This section must identify the required content of an application and the forms or formats that an applicant must use to submit it. If any requirements are stated elsewhere because they are general requirements that apply to multiple programs or funding opportunities, this section should refer to where those requirements may be found. This section also should include required forms or formats as part of the announcement or state where the applicant may obtain them.

This section should specifically address content and form or format requirements for:

i. Pre-applications, letters of intent, or white papers required or encouraged (see Section D.4), including any limitations on the number of pages or other formatting requirements similar to those for full applications.

ii. The application as a whole. For all submissions, this would include any limitations on the number of pages, font size and typeface, margins, paper size, number of copies, and sequence or assembly requirements. If electronic submission is permitted or required, this could include special requirements for formatting or signatures.

iii. Component pieces of the application (*e.g.*, if all copies of the application must bear original signatures on the face page or the program narrative may not exceed 10 pages). This includes any pieces that may be submitted separately by third parties (*e.g.*, references or letters confirming commitments from third parties that will be contributing a portion of any required cost sharing).

iv. Information that successful applicants must submit after notification of intent to make a Federal award, but prior to a Federal award. This could include evidence of compliance with requirements relating to human subjects or information needed to comply with the National Environmental Policy Act (NEPA) (42 U.S.C. 4321-4370h).

3. *Unique Entity Identifier and System for Award Management (SAM)—Required.*

This paragraph must state clearly that each applicant (unless the applicant is an individual or Federal awarding agency that is excepted from those requirements under 2 CFR 25.110(b) or (c), or has an exception approved by the Federal awarding agency under 2 CFR 25.110(d)) is required to:

(i) Be registered in SAM before submitting its application;

(ii) provide a valid unique entity identifier in its application; and

(iii) continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency.

It also must state that the Federal awarding agency may not make a Federal award to an applicant until the applicant has complied with all applicable unique entity identifier and SAM requirements and, if an applicant has not fully complied with the requirements by the time the Federal awarding agency is ready to make a Federal award, the Federal awarding agency may determine that the applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant.

4. *Submission Dates and Times—Required.* Announcements must identify due dates and times for all submissions. This includes not only the full applications but also any preliminary submissions (e.g., letters of intent, white papers, or pre-applications). It also includes any other submissions of information before Federal award that are separate from the full application. If the funding opportunity is a general announcement that is open for a period of time with no specific due dates for applications, this section should say so. Note that the information on dates that is included in this section also must appear with other overview information in a location preceding the full text of the announcement (see §75.203).

Each type of submission should be designated as encouraged or required and, if required, any deadline date (or dates, if the Federal awarding agency plans more than one cycle of application submission, review, and Federal award under the announcement) should be specified. The announcement must state (or provide a reference to another document that states):

i. Any deadline in terms of a date and local time. If the due date falls on a Saturday, Sunday, or Federal holiday, the reporting package is due the next business day.

ii. What the deadline means (e.g., whether it is the date and time by which the Federal awarding agency must receive the application, the date by which the application must be postmarked, or something else) and how that depends, if at all, on the submission method (e.g., mail, electronic, or personal/courier delivery).

iii. The effect of missing a deadline (e.g., whether late applications are neither reviewed nor considered or are reviewed and considered under some circumstances).

iv. How the receiving Federal office determines whether an application or pre-application has been submitted before the deadline. This includes the form of acceptable proof of mailing or system-generated documentation of receipt date and time.

This section also may indicate whether, when, and in what form the applicant will receive an acknowledgement of receipt. This information should be displayed in ways that will be easy to understand and use. It can be difficult to extract all needed information from narrative paragraphs, even when they are well written. A tabular form for providing a summary of the information may help applicants for some

programs and give them what effectively could be a checklist to verify the completeness of their application package before submission.

5. *Intergovernmental Review—Required, if applicable.* If the funding opportunity is subject to Executive Order 12372, “Intergovernmental Review of Federal Programs,” the notice must say so. In alerting applicants that they must contact their state's Single Point of Contact (SPOC) to find out about and comply with the state's process under Executive Order 12372, it may be useful to inform potential applicants that the names and addresses of the SPOCs are listed in the Office of Management and Budget's Web site. www.whitehouse.gov/omb/grants/spoc.html.

6. *Funding Restrictions—Required.* Notices must include information on funding restrictions in order to allow an applicant to develop an application and budget consistent with program requirements. Examples are whether construction is an allowable activity, if there are any limitations on direct costs such as foreign travel or equipment purchases, and if there are any limits on indirect costs (or facilities and administrative costs). Applicants must be advised if Federal awards will not allow reimbursement of pre-Federal award costs.

7. *Other Submission Requirements— Required.* This section must address any other submission requirements not included in the other paragraphs of this section. This might include the format of submission, *i.e.*, paper or electronic, for each type of required submission. Applicants should not be required to submit in more than one format and this section should indicate whether they may choose whether to submit applications in hard copy or electronically, may submit only in hard copy, or may submit only electronically.

This section also must indicate where applications (and any pre-applications) must be submitted if sent by postal mail, electronic means, or hand-delivery. For postal mail submission, this must include the name of an office, official, individual or function (*e.g.*, application receipt center) and a complete mailing address. For electronic submission, this must include the URL or email address; whether a password(s) is required; whether particular software or other electronic capabilities are required; what to do in the event of system problems and a point of contact who will be available in the event the applicant experiences technical difficulties.¹

¹With respect to electronic methods for providing information about funding opportunities or accepting applicants' submissions of information, each HHS awarding agency is responsible for compliance with Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794d).

E. Application Review Information

1. *Criteria—Required.* This section must address the criteria that the Federal awarding agency will use to evaluate applications. This includes the merit and other review criteria that evaluators will use to judge applications, including any statutory, regulatory, or other preferences (*e.g.*, minority status or Native American tribal preferences) that will be applied in the review process. These criteria are distinct from eligibility criteria that are addressed before an application is accepted for review and any program policy or other factors that are applied during the selection process, after the review process is completed. The intent is to make the application process transparent so applicants can make informed decisions when preparing their applications to maximize fairness of the process. The announcement should clearly describe all criteria, including any sub-criteria. If criteria vary in importance, the announcement should specify the relative percentages, weights, or other means used to distinguish among them. For statutory, regulatory, or other preferences, the announcement should provide a detailed explanation of those preferences with an explicit indication of their effect (*e.g.*, whether they result in additional points being assigned).

If an applicant's proposed cost sharing will be considered in the review process (as opposed to being an eligibility criterion described in Section C.2), the announcement must specifically address how it

will be considered (e.g., to assign a certain number of additional points to applicants who offer cost sharing, or to break ties among applications with equivalent scores after evaluation against all other factors). If cost sharing will not be considered in the evaluation, the announcement should say so, so that there is no ambiguity for potential applicants. Vague statements that cost sharing is encouraged, without clarification as to what that means, are unhelpful to applicants. It also is important that the announcement be clear about any restrictions on the types of cost (e.g., in-kind contributions) that are acceptable as cost sharing.

2. Review and Selection Process—Required. This section may vary in the level of detail provided. The announcement must list any program policy or other factors or elements, other than merit criteria, that the selecting official may use in selecting applications for Federal award (e.g., geographical dispersion, program balance, or diversity). The HHS awarding agency may also include other appropriate details. For example, this section may indicate who is responsible for evaluation against the merit criteria (e.g., peers external to the HHS awarding agency or HHS awarding agency personnel) and/or who makes the final selections for Federal awards. If there is a multi-phase review process (e.g., an external panel advising internal HHS awarding agency personnel who make final recommendations to the deciding official), the announcement may describe the phases. It also may include: the number of people on an evaluation panel and how it operates, the way reviewers are selected, reviewer qualifications, and the way that conflicts of interest are avoided. With respect to electronic methods for providing information about funding opportunities or accepting applicants' submissions of information, each HHS awarding agency is responsible for compliance with Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794d).

In addition, if the HHS awarding agency permits applicants to nominate suggested reviewers of their applications or suggest those they feel may be inappropriate due to a conflict of interest, that information should be included in this section.

3. For any Federal award under a notice of funding opportunity, if the HHS awarding agency anticipates that the total Federal share will be greater than the simplified acquisition threshold on any Federal award under a notice of funding opportunity may include, over the period of performance (see §75.2 Simplified Acquisition Threshold), this section must also inform applicants:

i. That the HHS awarding agency, prior to making a Federal award with a total amount of Federal share greater than the simplified acquisition threshold, is required to review and consider any information about the applicant that is in the designated integrity and performance system accessible through SAM (currently FAPIIS) (see 41 U.S.C. 2313);

ii. That an applicant, at its option, may review information in the designated integrity and performance systems accessible through SAM and comment on any information about itself that the HHS awarding agency previously entered and is currently in the designated integrity and performance system accessible through SAM;

iii. That the HHS awarding agency will consider any comments by the applicant, in addition to the other information in the designated integrity and performance system, in making a judgment about the applicant's integrity, business ethics, and record of performance under Federal awards when completing the review of risk posed by applicants as described in §75.205.

4. Anticipated Announcement and Federal Award Dates—Optional. This section is intended to provide applicants with information they can use for planning purposes. If there is a single application deadline followed by the simultaneous review of all applications, the HHS awarding agency can include in this section information about the anticipated dates for announcing or notifying successful and unsuccessful applicants and for having Federal awards in place. If applications are received and evaluated on a "rolling" basis at different times during an extended period, it may be appropriate to give applicants an estimate of the time needed to process an application and notify the applicant of the HHS awarding agency's decision.

F. Federal Award Administration Information

1. Federal Award Notices—Required. This section must address what a successful applicant can expect to receive following selection. If the HHS awarding agency's practice is to provide a separate notice stating that an application has been selected before it actually makes the Federal award, this section would be the place to indicate that the letter is not an authorization to begin performance (to the extent that it allows charging to Federal awards of pre-award costs at the non-Federal entity's own risk). This section should indicate that the notice of Federal award signed by the grants officer (or equivalent) is the authorizing document, and whether it is provided through postal mail or by electronic means and to whom. It also may address the timing, form, and content of notifications to unsuccessful applicants. See also §75.210.

2. Administrative and National Policy Requirements—Required. This section must identify the usual administrative and national policy requirements the HHS awarding agency's Federal awards may include. Providing this information lets a potential applicant identify any requirements with which it would have difficulty complying if its application is successful. In those cases, early notification about the requirements allows the potential applicant to decide not to apply or to take needed actions before receiving the Federal award. The announcement need not include all of the terms and conditions of the Federal-award, but may refer to a document (with information about how to obtain it) or Internet site where applicants can see the terms and conditions. If this funding opportunity will lead to Federal awards with some specific terms and conditions that differ from the HHS awarding agency's usual (sometimes called "general") terms and conditions, this section should highlight those specific terms and conditions. Doing so will alert applicants that have received Federal awards from the HHS awarding agency previously and might not otherwise expect different terms and conditions. For the same reason, the announcement should inform potential applicants about special requirements that could apply to particular Federal awards after the review of applications and other information, based on the particular circumstances of the effort to be supported (e.g., if human subjects were to be involved or if some situations may justify special terms on intellectual property, data sharing or security requirements).

3. Reporting—Required. This section must include general information about the type (e.g., financial or performance), frequency, and means of submission (paper or electronic) of post-Federal award reporting requirements. Highlight any special reporting requirements for Federal awards under this funding opportunity that differ (e.g., by report type, frequency, form/format, or circumstances for use) from what the HHS awarding agency's Federal awards usually require. HHS agencies must also describe in this section all relevant requirements such as those at 2 CFR 180.335 and 2 CFR 180.350. If the Federal share of any Federal award may include more than \$500,000 over the period of performance, this section must inform potential applicants about the post award reporting requirements in Appendix XII.

G. HHS Awarding Agency Contact(s)—Required

The announcement must give potential applicants a point(s) of contact for answering questions or helping with problems while the funding opportunity is open. The intent of this requirement is to be as helpful as possible to potential applicants, so the HHS awarding agency should consider approaches such as giving:

1. Points of contact who may be reached in multiple ways (e.g., by telephone, FAX, and/or email, as well as regular mail).

2. A fax or email address that multiple people access, so that someone will respond even if others are unexpectedly absent during critical periods.

3. Different contacts for distinct kinds of help (e.g., one for questions of programmatic content and a second for administrative questions).

H. Other Information—Optional

This section may include any additional information that will assist a potential applicant. For example, the section might:

1. Indicate whether this is a new program or a one-time initiative.
2. Mention related programs or other upcoming or ongoing HHS awarding agency funding opportunities for similar activities.
3. Include current Internet addresses for the HHS awarding agency Web sites that may be useful to an applicant in understanding the program.
4. Alert applicants to the need to identify proprietary information and inform them about the way the HHS awarding agency will handle it.
5. Include certain routine notices to applicants (e.g., that the Federal Government is not obligated to make any Federal award as a result of the announcement or that only grants officers can bind the Federal Government to the expenditure of funds).

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3018, Jan. 20, 2016]

Appendix II to Part 75—Contract Provisions for Non-Federal Entity Contracts Under Federal Awards

In addition to other provisions required by the HHS agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

A. Contracts for more than the simplified acquisition threshold currently set at \$150,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

B. All contracts in excess of \$10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement.

C. Equal Employment Opportunity. Except as otherwise provided under 41 CFR part 60, all contracts that meet the definition of “federally assisted construction contract” in 41 CFR part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, Equal Employment Opportunity (30 FR 12319, 12935, 3 CFR 1964-1965 Comp., p. 339) as amended by Executive Order 11375 amending Executive Order 11246 Relating to Equal Employment Opportunity, and implementing regulations at 41 CFR part 60.

D. Davis-Bacon Act, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR part 5). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each

solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR part 3). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

E. Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

F. Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of "funding agreement" under 37 CFR 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR part 401 and any implementing regulations issued by the awarding agency.

G. Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended—Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

H. Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award (see 2 CFR 180.220) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR part 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

I. Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

J. See §75.331 Procurement of recovered materials.

Appendix III to Part 75—Indirect (F&A) Costs Identification and Assignment, and Rate Determination for Institutions of Higher Education (IHEs)

A. General

This appendix provides criteria for identifying and computing indirect (or indirect (F&A)) rates at IHEs (institutions). Indirect (F&A) costs are those that are incurred for common or joint objectives and therefore cannot be identified readily and specifically with a particular sponsored project, an instructional activity, or any other institutional activity. See subsection B.1, for a discussion of the components of indirect (F&A) costs.

1. Major Functions of an Institution

Refers to instruction, organized research, other sponsored activities and other institutional activities as defined in this section:

a. *Instruction* means the teaching and training activities of an institution. Except for research training as provided in subsection b, this term includes all teaching and training activities, whether they are offered for credits toward a degree or certificate or on a non-credit basis, and whether they are offered through regular academic departments or separate divisions, such as a summer school division or an extension division. Also considered part of this major function are departmental research, and, where agreed to, university research.

(1) *Sponsored instruction and training* means specific instructional or training activity established by grant, contract, or cooperative agreement. For purposes of the cost principles, this activity may be considered a major function even though an institution's accounting treatment may include it in the instruction function.

(2) *Departmental research* means research, development and scholarly activities that are not organized research and, consequently, are not separately budgeted and accounted for. Departmental research, for purposes of this document, is not considered as a major function, but as a part of the instruction function of the institution.

(3) Only mandatory cost sharing or cost sharing specifically committed in the project budget must be included in the organized research base for computing the indirect (F&A) cost rate or reflected in any allocation of indirect costs. Salary costs above statutory limits are not considered cost sharing.

b. *Organized research* means all research and development activities of an institution that are separately budgeted and accounted for. It includes:

(1) *Sponsored research* means all research and development activities that are sponsored by Federal and non-Federal agencies and organizations. This term includes activities involving the training of individuals in research techniques (commonly called research training) where such activities utilize the same facilities as other research and development activities and where such activities are not included in the instruction function.

(2) *University research* means all research and development activities that are separately budgeted and accounted for by the institution under an internal application of institutional funds. University research, for purposes of this document, must be combined with sponsored research under the function of organized research.

c. *Other sponsored activities* means programs and projects financed by Federal and non-Federal agencies and organizations which involve the performance of work other than instruction and organized research. Examples of such programs and projects are health service projects and community service programs. However, when any of these activities are undertaken by the institution without outside support, they may be classified as other institutional activities.

d. *Other institutional activities* means all activities of an institution except for instruction, departmental research, organized research, and other sponsored activities, as defined in this section; indirect (F&A) cost activities identified in this Appendix paragraph B, Identification and assignment of indirect (F&A) costs; and specialized services facilities described in §75.468 of this part.

Examples of other institutional activities include operation of residence halls, dining halls, hospitals and clinics, student unions, intercollegiate athletics, bookstores, faculty housing, student apartments, guest houses, chapels, theaters, public museums, and other similar auxiliary enterprises. This definition also includes any other categories of activities, costs of which are "unallowable" to Federal awards, unless otherwise indicated in an award.

2. Criteria for Distribution

a. *Base period.* A base period for distribution of indirect (F&A) costs is the period during which the costs are incurred. The base period normally should coincide with the fiscal year established by the institution, but in any event the base period should be so selected as to avoid inequities in the distribution of costs.

b. *Need for cost groupings.* The overall objective of the indirect (F&A) cost allocation process is to distribute the indirect (F&A) costs described in Section B, Identification and assignment of indirect (F&A) costs, to the major functions of the institution in proportions reasonably consistent with the nature and extent of their use of the institution's resources. In order to achieve this objective, it may be necessary to provide for selective distribution by establishing separate groupings of cost within one or more of the indirect (F&A) cost categories referred to in subsection B.1. In general, the cost groupings established within a category should constitute, in each case, a pool of those items of expense that are considered to be of like nature in terms of their relative contribution to (or degree of remoteness from) the particular cost objectives to which distribution is appropriate. Cost groupings should be established considering the general guides provided in subsection c of this section. Each such pool or cost grouping should then be distributed individually to the related cost objectives, using the distribution base or method most appropriate in light of the guidelines set forth in subsection d of this section.

c. *General considerations on cost groupings.* The extent to which separate cost groupings and selective distribution would be appropriate at an institution is a matter of judgment to be determined on a case-by-case basis. Typical situations which may warrant the establishment of two or more separate cost groupings (based on account classification or analysis) within an indirect (F&A) cost category include but are not limited to the following:

(1) If certain items or categories of expense relate solely to one of the major functions of the institution or to less than all functions, such expenses should be set aside as a separate cost grouping for direct assignment or selective allocation in accordance with the guides provided in subsections b and d.

(2) If any types of expense ordinarily treated as general administration or departmental administration are charged to Federal awards as direct costs, expenses applicable to other activities of the institution when incurred for the same purposes in like circumstances must, through separate cost groupings, be excluded from the indirect (F&A) costs allocable to those Federal awards and included in the direct cost of other activities for cost allocation purposes.

(3) If it is determined that certain expenses are for the support of a service unit or facility whose output is susceptible of measurement on a workload or other quantitative basis, such expenses should be set aside as a separate cost grouping for distribution on such basis to organized research, instructional, and other activities at the institution or within the department.

(4) If activities provide their own purchasing, personnel administration, building maintenance or similar service, the distribution of general administration and general expenses, or operation and maintenance expenses to such activities should be accomplished through cost groupings which include only that portion of central indirect (F&A) costs (such as for overall management) which are properly allocable to such activities.

(5) If the institution elects to treat fringe benefits as indirect (F&A) charges, such costs should be set aside as a separate cost grouping for selective distribution to related cost objectives.

(6) The number of separate cost groupings within a category should be held within practical limits, after taking into consideration the materiality of the amounts involved and the degree of precision attainable through less selective methods of distribution.

d. Selection of distribution method.

(1) Actual conditions must be taken into account in selecting the method or base to be used in distributing individual cost groupings. The essential consideration in selecting a base is that it be the one best suited for assigning the pool of costs to cost objectives in accordance with benefits derived; with a traceable cause-and-effect relationship; or with logic and reason, where neither benefit nor a cause-and-effect relationship is determinable.

(2) If a cost grouping can be identified directly with the cost objective benefitted, it should be assigned to that cost objective.

(3) If the expenses in a cost grouping are more general in nature, the distribution may be based on a cost analysis study which results in an equitable distribution of the costs. Such cost analysis studies may take into consideration weighting factors, population, or space occupied if appropriate. Cost analysis studies, however, must (a) be appropriately documented in sufficient detail for subsequent review by the cognizant agency for indirect costs, (b) distribute the costs to the related cost objectives in accordance with the relative benefits derived, (c) be statistically sound, (d) be performed specifically at the institution at which the results are to be used, and (e) be reviewed periodically, but not less frequently than rate negotiations, updated if necessary, and used consistently. Any assumptions made in the study must be stated and explained. The use of cost analysis studies and periodic changes in the method of cost distribution must be fully justified.

(4) If a cost analysis study is not performed, or if the study does not result in an equitable distribution of the costs, the distribution must be made in accordance with the appropriate base cited in Section B, unless one of the following conditions is met:

(a) It can be demonstrated that the use of a different base would result in a more equitable allocation of the costs, or that a more readily available base would not increase the costs charged to Federal awards, or

(b) The institution qualifies for, and elects to use, the simplified method for computing indirect (F&A) cost rates described in Section D.

(5) Notwithstanding subsection (3), effective July 1, 1998, a cost analysis or base other than that in Section B must not be used to distribute utility or student services costs. Instead, subsections B.4.c may be used in the recovery of utility costs.

e. Order of distribution.

(1) Indirect (F&A) costs are the broad categories of costs discussed in Section B.1.

(2) Depreciation, interest expenses, operation and maintenance expenses, and general administrative and general expenses should be allocated in that order to the remaining indirect (F&A) cost categories as well as to the major functions and specialized service facilities of the institution. Other cost categories may be allocated in the order determined to be most appropriate by the institutions. When cross allocation of costs is made as provided in subsection (3), this order of allocation does not apply.

(3) Normally an indirect (F&A) cost category will be considered closed once it has been allocated to other cost objectives, and costs may not be subsequently allocated to it. However, a cross allocation of costs between two or more indirect (F&A) cost categories may be used if such allocation will result in a more equitable allocation of costs. If a cross allocation is used, an appropriate modification to the composition of the indirect (F&A) cost categories described in Section B is required.

B. Identification and Assignment of Indirect (F&A) Costs

1. Definition of Facilities and Administration

See §75.414 which provides the basis for these indirect cost requirements.

2. Depreciation

a. The expenses under this heading are the portion of the costs of the institution's buildings, capital improvements to land and buildings, and equipment which are computed in accordance with §75.436.

b. In the absence of the alternatives provided for in Section A.2.d, the expenses included in this category must be allocated in the following manner:

(1) Depreciation on buildings used exclusively in the conduct of a single function, and on capital improvements and equipment used in such buildings, must be assigned to that function.

(2) Depreciation on buildings used for more than one function, and on capital improvements and equipment used in such buildings, must be allocated to the individual functions performed in each building on the basis of usable square feet of space, excluding common areas such as hallways, stairwells, and rest rooms.

(3) Depreciation on buildings, capital improvements and equipment related to space (*e.g.*, individual rooms, laboratories) used jointly by more than one function (as determined by the users of the space) must be treated as follows. The cost of each jointly used unit of space must be allocated to benefitting functions on the basis of:

(a) The employee full-time equivalents (FTEs) or salaries and wages of those individual functions benefitting from the use of that space; or

(b) Institution-wide employee FTEs or salaries and wages applicable to the benefitting major functions (see Section A.1) of the institution.

(4) Depreciation on certain capital improvements to land, such as paved parking areas, fences, sidewalks, and the like, not included in the cost of buildings, must be allocated to user categories of students and employees on a full-time equivalent basis. The amount allocated to the student category must be assigned to the instruction function of the institution. The amount allocated to the employee category must be further allocated to the major functions of the institution in proportion to the salaries and wages of all employees applicable to those functions.

3. Interest

Interest on debt associated with certain buildings, equipment and capital improvements, as defined in §75.449, must be classified as an expenditure under the category Facilities. These costs must be allocated in the same manner as the depreciation on the buildings, equipment and capital improvements to which the interest relates.

4. Operation and Maintenance Expenses

a. The expenses under this heading are those that have been incurred for the administration, supervision, operation, maintenance, preservation, and protection of the institution's physical plant. They include expenses normally incurred for such items as janitorial and utility services; repairs and ordinary or normal alterations of buildings, furniture and equipment; care of grounds; maintenance and operation of buildings and other plant facilities; security; earthquake and disaster preparedness; environmental safety; hazardous waste disposal; property, liability and all other insurance relating to property; space and capital leasing; facility planning and management; and central receiving. The operation and maintenance expense category should also include its allocable share of fringe benefit costs, depreciation, and interest costs.

b. In the absence of the alternatives provided for in Section A.2.d, the expenses included in this category must be allocated in the same manner as described in subsection 2.b for depreciation.

c. A utility cost adjustment of up to 1.3 percentage points may be included in the negotiated indirect cost rate of the IHE for organized research, per the computation alternatives in paragraphs (c)(1) and (2) of this section:

(1) Where space is devoted to a single function and metering allows unambiguous measurement of usage related to that space, costs must be assigned to the function located in that space.

(2) Where space is allocated to different functions and metering does not allow unambiguous measurement of usage by function, costs must be allocated as follows:

(i) Utilities costs should be apportioned to functions in the same manner as depreciation, based on the calculated difference between the site or building actual square footage for monitored research laboratory space (site, building, floor, or room), and a separate calculation prepared by the IHE using the "effective square footage" described in subsection (c)(2)(ii) of this section.

(ii) "Effective square footage" allocated to research laboratory space must be calculated as the actual square footage times the relative energy utilization index (REUI) posted on the OMB Web site at the time of a rate determination.

A. This index is the ratio of a laboratory energy use index (lab EUI) to the corresponding index for overall average college or university space (college EUI).

B. In July 2012, values for these two indices (taken respectively from the Lawrence Berkeley Laboratory "Labs for the 21st Century" benchmarking

tool <http://labs21benchmarking.lbl.gov/CompareData.php> and the US Department of Energy "Buildings Energy Databook" and <http://buildingsdatabook.eren.doe.gov/CBECS.aspx>) were 310 kBtu/sq ft-yr. and 155 kBtu/sq ft-yr., so that the adjustment ratio is 2.0 by this methodology. To retain currency, OMB will adjust the EUI numbers from time to time (no more often than annually nor less often than every 5 years), using reliable and publicly disclosed data. Current values of both the EUIs and the REUI will be posted on the OMB Web site.

5. General Administration and General Expenses

a. The expenses under this heading are those that have been incurred for the general executive and administrative offices of educational institutions and other expenses of a general character which do not relate solely to any major function of the institution; *i.e.*, solely to (1) instruction, (2) organized research, (3) other sponsored activities, or (4) other institutional activities. The general administration and general expense category should also include its allocable share of fringe benefit costs, operation and maintenance expense, depreciation, and interest costs. Examples of general administration and general expenses include: Those expenses incurred by administrative offices that serve the entire university system of which the institution is a part; central offices of the institution such as the President's or Chancellor's office, the offices for institution-wide financial management, business services, budget and planning, personnel management, and safety and risk management; the office of the General Counsel; and the operations of the central administrative management information systems. General administration and general expenses must not include expenses incurred within non-university-wide deans' offices, academic departments, organized research units, or similar organizational units. (See subsection 6.)

b. In the absence of the alternatives provided for in Section A.2.d, the expenses included in this category must be grouped first according to common major functions of the institution to which they render services or provide benefits. The aggregate expenses of each group must then be allocated to serviced or benefitted functions on the modified total cost basis. Modified total costs consist of the same elements as those in Section C.2. When an activity included in this indirect (F&A) cost category provides a service or product to another institution or organization, an appropriate adjustment must be made to either the expenses or the basis of allocation or both, to assure a proper allocation of costs.

6. Departmental Administration Expenses

a. The expenses under this heading are those that have been incurred for administrative and supporting services that benefit common or joint departmental activities or objectives in academic deans' offices, academic departments and divisions, and organized research units. Organized research units include such units as institutes, study centers, and research centers. Departmental administration expenses are subject to the following limitations.

(1) Academic deans' offices. Salaries and operating expenses are limited to those attributable to administrative functions.

(2) Academic departments:

(a) Salaries and fringe benefits attributable to the administrative work (including bid and proposal preparation) of faculty (including department heads) and other professional personnel conducting research and/or instruction, must be allowed at a rate of 3.6 percent of modified total direct costs. This category does not include professional business or professional administrative officers. This allowance must be added to the computation of the indirect (F&A) cost rate for major functions in Section C; the expenses covered by the allowance must be excluded from the departmental administration cost pool. No documentation is required to support this allowance.

(b) Other administrative and supporting expenses incurred within academic departments are allowable provided they are treated consistently in like circumstances. This would include expenses such

as the salaries of secretarial and clerical staffs, the salaries of administrative officers and assistants, travel, office supplies, stockrooms, and the like.

(3) Other fringe benefit costs applicable to the salaries and wages included in subsections (1) and (2) are allowable, as well as an appropriate share of general administration and general expenses, operation and maintenance expenses, and depreciation.

(4) Federal agencies may authorize reimbursement of additional costs for department heads and faculty only in exceptional cases where an institution can demonstrate undue hardship or detriment to project performance.

b. The following guidelines apply to the determination of departmental administrative costs as direct or indirect (F&A) costs.

(1) In developing the departmental administration cost pool, special care should be exercised to ensure that costs incurred for the same purpose in like circumstances are treated consistently as either direct or indirect (F&A) costs. For example, salaries of technical staff, laboratory supplies (e.g., chemicals), telephone toll charges, animals, animal care costs, computer costs, travel costs, and specialized shop costs must be treated as direct costs wherever identifiable to a particular cost objective. Direct charging of these costs may be accomplished through specific identification of individual costs to benefitting cost objectives, or through recharge centers or specialized service facilities, as appropriate under the circumstances. See §§75.413(c) and 75.468.

(2) Items such as office supplies, postage, local telephone costs, and memberships must normally be treated as indirect (F&A) costs.

c. In the absence of the alternatives provided for in Section A.2.d, the expenses included in this category must be allocated as follows:

(1) The administrative expenses of the dean's office of each college and school must be allocated to the academic departments within that college or school on the modified total cost basis.

(2) The administrative expenses of each academic department, and the department's share of the expenses allocated in subsection (1) must be allocated to the appropriate functions of the department on the modified total cost basis.

7. Sponsored Projects Administration

a. The expenses under this heading are limited to those incurred by a separate organization(s) established primarily to administer sponsored projects, including such functions as grant and contract administration (Federal and non-Federal), special security, purchasing, personnel, administration, and editing and publishing of research and other reports. They include the salaries and expenses of the head of such organization, assistants, and immediate staff, together with the salaries and expenses of personnel engaged in supporting activities maintained by the organization, such as stock rooms, print shops, and the like. This category also includes an allocable share of fringe benefit costs, general administration and general expenses, operation and maintenance expenses, and depreciation. Appropriate adjustments will be made for services provided to other functions or organizations.

b. In the absence of the alternatives provided for in Section A.2.d, the expenses included in this category must be allocated to the major functions of the institution under which the sponsored projects are conducted on the basis of the modified total cost of sponsored projects.

c. An appropriate adjustment must be made to eliminate any duplicate charges to Federal awards when this category includes similar or identical activities as those included in the general administration and general expense category or other indirect (F&A) cost items, such as accounting, procurement, or personnel administration.

8. Library Expenses

a. The expenses under this heading are those that have been incurred for the operation of the library, including the cost of books and library materials purchased for the library, less any items of library income that qualify as applicable credits under §75.406. The library expense category should also include the fringe benefits applicable to the salaries and wages included therein, an appropriate share of general administration and general expense, operation and maintenance expense, and depreciation. Costs incurred in the purchases of rare books (museum-type books) with no value to Federal awards should not be allocated to them.

b. In the absence of the alternatives provided for in Section A.2.d, the expenses included in this category must be allocated first on the basis of primary categories of users, including students, professional employees, and other users.

(1) The student category must consist of full-time equivalent students enrolled at the institution, regardless of whether they earn credits toward a degree or certificate.

(2) The professional employee category must consist of all faculty members and other professional employees of the institution, on a full-time equivalent basis. This category may also include post-doctorate fellows and graduate students.

(3) The other users category must consist of a reasonable factor as determined by institutional records to account for all other users of library facilities.

c. Amount allocated in paragraph b of this section must be assigned further as follows:

(1) The amount in the student category must be assigned to the instruction function of the institution.

(2) The amount in the professional employee category must be assigned to the major functions of the institution in proportion to the salaries and wages of all faculty members and other professional employees applicable to those functions.

(3) The amount in the other users category must be assigned to the other institutional activities function of the institution.

9. Student Administration and Services

a. The expenses under this heading are those that have been incurred for the administration of student affairs and for services to students, including expenses of such activities as deans of students, admissions, registrar, counseling and placement services, student advisers, student health and infirmary services, catalogs, and commencements and convocations. The salaries of members of the academic staff whose responsibilities to the institution require administrative work that benefits sponsored projects may also be included to the extent that the portion charged to student administration is determined in accordance with Subpart E of this part. This expense category also includes the fringe benefit costs applicable to the salaries and wages included therein, an appropriate share of general administration and general expenses, operation and maintenance, interest expense, and depreciation.

b. In the absence of the alternatives provided for in Section A.2.d, the expenses in this category must be allocated to the instruction function, and subsequently to Federal awards in that function.

10. Offset for Indirect (F&A) Expenses Otherwise Provided for by the Federal Government

a. The items to be accumulated under this heading are the reimbursements and other payments from the Federal Government which are made to the institution to support solely, specifically, and directly, in whole or in part, any of the administrative or service activities described in subsections 2 through 9.

b. The items in this group must be treated as a credit to the affected individual indirect (F&A) cost category before that category is allocated to benefitting functions.

C. Determination and Application of Indirect (F&A) Cost Rate or Rates

1. Indirect (F&A) Cost Pools

a. (1) Subject to subsection b, the separate categories of indirect (F&A) costs allocated to each major function of the institution as prescribed in Section B of this paragraph C.1-, must be aggregated and treated as a common pool for that function. The amount in each pool must be divided by the distribution base described in subsection 2 to arrive at a single indirect (F&A) cost rate for each function.

(2) The rate for each function is used to distribute indirect (F&A) costs to individual Federal awards of that function. Since a common pool is established for each major function of the institution, a separate indirect (F&A) cost rate would be established for each of the major functions described in Section A.1 under which Federal awards are carried out.

(3) Each institution's indirect (F&A) cost rate process must be appropriately designed to ensure that Federal sponsors do not in any way subsidize the indirect (F&A) costs of other sponsors, specifically activities sponsored by industry and foreign governments. Accordingly, each allocation method used to identify and allocate the indirect (F&A) cost pools, as described in Sections A.2, and B.2 through B.9, must contain the full amount of the institution's modified total costs or other appropriate units of measurement used to make the computations. In addition, the final rate distribution base (as defined in subsection 2) for each major function (organized research, instruction, etc., as described in Section A.1) must contain all the programs or activities which utilize the indirect (F&A) costs allocated to that major function. At the time an indirect (F&A) cost proposal is submitted to a cognizant agency for indirect costs, each institution must describe the process it uses to ensure that Federal funds are not used to subsidize industry and foreign government funded programs.

b. In some instances a single rate basis for use across the board on all work within a major function at an institution may not be appropriate. A single rate for research, for example, might not take into account those different environmental factors and other conditions which may affect substantially the indirect (F&A) costs applicable to a particular segment of research at the institution. A particular segment of research may be that performed under a single sponsored agreement or it may consist of research under a group of Federal awards performed in a common environment. The environmental factors are not limited to the physical location of the work. Other important factors are the level of the administrative support required, the nature of the facilities or other resources employed, the scientific disciplines or technical skills involved, the organizational arrangements used, or any combination thereof. If a particular segment of a sponsored agreement is performed within an environment which appears to generate a significantly different level of indirect (F&A) costs, provisions should be made for a separate indirect (F&A) cost pool applicable to such work. The separate indirect (F&A) cost pool should be developed during the regular course of the rate determination process and the separate indirect (F&A) cost rate resulting therefrom should be utilized; provided it is determined that (1) such indirect (F&A) cost rate differs significantly from that which would have been obtained under subsection a, and (2) the volume of work to which such rate would apply is material in relation to other Federal awards at the institution.

2. The Distribution Basis

Indirect (F&A) costs must be distributed to applicable Federal awards and other benefitting activities within each major function (see section A.1, Major functions of an institution) on the basis of modified total direct costs (MTDC), consisting of all salaries and wages, fringe benefits, materials and supplies, services, travel, and up to the first \$25,000 of each subaward (regardless of the period covered by the subaward). MTDC is defined in §75.2. For this purpose, an indirect (F&A) cost rate should be determined for each of the separate indirect (F&A) cost pools developed pursuant to subsection 1. The rate in each case should be stated as the percentage which the amount of the particular indirect (F&A) cost pool is of the modified total direct costs identified with such pool.

3. Negotiated Lump Sum for Indirect (F&A) Costs

A negotiated fixed amount in lieu of indirect (F&A) costs may be appropriate for self-contained, off-campus, or primarily subcontracted activities where the benefits derived from an institution's indirect (F&A) services cannot be readily determined. Such negotiated indirect (F&A) costs will be treated as an offset before allocation to instruction, organized research, other sponsored activities, and other institutional activities. The base on which such remaining expenses are allocated should be appropriately adjusted.

4. Predetermined Rates for Indirect (F&A) Costs

Public Law 87-638 (76 Stat. 437) as amended (41 U.S.C. 4708) authorizes the use of predetermined rates in determining the "indirect costs" (indirect (F&A) costs) applicable under research agreements with educational institutions. The stated objectives of the law are to simplify the administration of cost-type research and development contracts (including grants) with educational institutions, to facilitate the preparation of their budgets, and to permit more expeditious closeout of such contracts when the work is completed. In view of the potential advantages offered by this procedure, negotiation of predetermined rates for indirect (F&A) costs for a period of two to four years should be the norm in those situations where the cost experience and other pertinent facts available are deemed sufficient to enable the parties involved to reach an informed judgment as to the probable level of indirect (F&A) costs during the ensuing accounting periods.

5. Negotiated Fixed Rates and Carry-Forward Provisions

When a fixed rate is negotiated in advance for a fiscal year (or other time period), the over- or under-recovery for that year may be included as an adjustment to the indirect (F&A) cost for the next rate negotiation. When the rate is negotiated before the carry-forward adjustment is determined, the carry-forward amount may be applied to the next subsequent rate negotiation. When such adjustments are to be made, each fixed rate negotiated in advance for a given period will be computed by applying the expected indirect (F&A) costs allocable to Federal awards for the forecast period plus or minus the carry-forward adjustment (over- or under-recovery) from the prior period, to the forecast distribution base. Unrecovered amounts under lump-sum agreements or cost-sharing provisions of prior years must not be carried forward for consideration in the new rate negotiation. There must, however, be an advance understanding in each case between the institution and the cognizant agency for indirect costs as to whether these differences will be considered in the rate negotiation rather than making the determination after the differences are known. Further, institutions electing to use this carry-forward provision may not subsequently change without prior approval of the cognizant agency for indirect costs. In the event that an institution returns to a post-determined rate, any over- or under-recovery during the period in which negotiated fixed rates and carry-forward provisions were followed will be included in the subsequent post-determined rates. Where multiple rates are used, the same procedure will be applicable for determining each rate.

6. Provisional and Final Rates for Indirect (F&A) Costs

Where the cognizant agency for indirect costs determines that cost experience and other pertinent facts do not justify the use of predetermined rates, or a fixed rate with a carry-forward, or if the parties cannot agree on an equitable rate, a provisional rate must be established. To prevent substantial overpayment or underpayment, the provisional rate may be adjusted by the cognizant agency for indirect costs during the institution's fiscal year. Predetermined or fixed rates may replace provisional rates at any time prior to the close of the institution's fiscal year. If a provisional rate is not replaced by a predetermined or fixed rate prior to the end of the institution's fiscal year, a final rate will be established and upward or downward adjustments will be made based on the actual allowable costs incurred for the period involved.

7. Fixed Rates for the Life of the Sponsored Agreement

a. Except as provided in paragraph (c)(1) of §75.414 Federal agencies must use the negotiated rates for indirect (F&A) costs in effect at the time of the initial award throughout the life of the Federal award. Award levels for Federal awards may not be adjusted in future years as a result of changes in negotiated rates. "Negotiated rates" per the rate agreement include final, fixed, and predetermined rates and exclude provisional rates. "Life" for the purpose of this subsection means each competitive segment of a project. A competitive segment is a period of years approved by the Federal awarding agency at the time of the Federal award. If negotiated rate agreements do not extend through the life of the Federal award at the time of the initial award, then the negotiated rate for the last year of the Federal award must be extended through the end of the life of the Federal award.

b. Except as provided in §75.414, when an educational institution does not have a negotiated rate with the Federal Government at the time of an award (because the educational institution is a new recipient or the parties cannot reach agreement on a rate), the provisional rate used at the time of the award must be adjusted once a rate is negotiated and approved by the cognizant agency for indirect costs.

8. Limitation on Reimbursement of Administrative Costs

a. Notwithstanding the provisions of subsection C.1.a, the administrative costs charged to Federal awards awarded or amended (including continuation and renewal awards) with effective dates beginning on or after the start of the institution's first fiscal year which begins on or after October 1, 1991, must be limited to 26% of modified total direct costs (as defined in subsection 2) for the total of General Administration and General Expenses, Departmental Administration, Sponsored Projects Administration, and Student Administration and Services (including their allocable share of depreciation, interest costs, operation and maintenance expenses, and fringe benefits costs, as provided by Section B, Identification and assignment of indirect (F&A) costs, and all other types of expenditures not listed specifically under one of the subcategories of facilities in Section B.

b. Institutions should not change their accounting or cost allocation methods if the effect is to change the charging of a particular type of cost from F&A to direct, or to reclassify costs, or increase allocations from the administrative pools identified in paragraph B.1 of this Appendix to the other F&A cost pools or fringe benefits. Cognizant agencies for indirect cost are authorized to allow changes where an institution's charging practices are at variance with acceptable practices followed by a substantial majority of other institutions.

9. Alternative Method for Administrative Costs

a. Notwithstanding the provisions of subsection C.1.a, an institution may elect to claim a fixed allowance for the "Administration" portion of indirect (F&A) costs. The allowance could be either 24% of modified total direct costs or a percentage equal to 95% of the most recently negotiated fixed or predetermined rate for the cost pools included under "Administration" as defined in Section B.1, whichever is less. Under this alternative, no cost proposal need be prepared for the "Administration"

portion of the indirect (F&A) cost rate nor is further identification or documentation of these costs required (see subsection c). Where a negotiated indirect (F&A) cost agreement includes this alternative, an institution must make no further charges for the expenditure categories described in Section B.5, Section B.6, Section B.7, and Section B.9.

b. In negotiations of rates for subsequent periods, an institution that has elected the option of subsection a may continue to exercise it at the same rate without further identification or documentation of costs.

c. If an institution elects to accept a threshold rate as defined in subsection a of this section, it is not required to perform a detailed analysis of its administrative costs. However, in order to compute the facilities components of its indirect (F&A) cost rate, the institution must reconcile its indirect (F&A) cost proposal to its financial statements and make appropriate adjustments and reclassifications to identify the costs of each major function as defined in Section A.1, as well as to identify and allocate the facilities components. Administrative costs that are not identified as such by the institution's accounting system (such as those incurred in academic departments) will be classified as instructional costs for purposes of reconciling indirect (F&A) cost proposals to financial statements and allocating facilities costs.

10. Individual Rate Components

In order to provide mutually agreed-upon information for management purposes, each indirect (F&A) cost rate negotiation or determination must include development of a rate for each indirect (F&A) cost pool as well as the overall indirect (F&A) cost rate.

11. Negotiation and Approval of Indirect (F&A) Rate

a. Cognizant agency for indirect costs is defined in §75.2.

(1) Cost negotiation cognizance is assigned to the Department of Health and Human Services (HHS) or the Department of Defense's Office of Naval Research (DOD), normally depending on which of the two agencies (HHS or DOD) provides more funds to the educational institution for the most recent three years. Information on funding must be derived from relevant data gathered by the National Science Foundation. In cases where neither HHS nor DOD provides Federal funding to an educational institution, the cognizant agency for indirect costs assignment must default to HHS. Notwithstanding the method for cognizance determination described in this section, other arrangements for cognizance of a particular educational institution may also be based in part on the types of research performed at the educational institution and must be decided based on mutual agreement between HHS and DOD. Where a non-Federal entity only receives funds as a subrecipient, see the requirements of §75.352.

(2) After cognizance is established, it must continue for a five-year period.

b. Acceptance of rates. See §75.414.

c. Correcting deficiencies. The cognizant agency for indirect costs must negotiate changes needed to correct systems deficiencies relating to accountability for Federal awards. Cognizant agencies for indirect costs must address the concerns of other affected agencies, as appropriate, and must negotiate special rates for Federal agencies that are required to limit recovery of indirect costs by statute.

d. Resolving questioned costs. The cognizant agency for indirect costs must conduct any necessary negotiations with an educational institution regarding amounts questioned by audit that are due the Federal Government related to costs covered by a negotiated agreement.

e. Reimbursement. Reimbursement to cognizant agencies for indirect costs for work performed under this Part may be made by reimbursement billing under the Economy Act, 31 U.S.C. 1535.

f. Procedure for establishing facilities and administrative rates must be established by one of the following methods:

(1) Formal negotiation. The cognizant agency for indirect costs is responsible for negotiating and approving rates for an educational institution on behalf of all Federal agencies. Federal awarding agencies that do not have cognizance for indirect costs must notify the cognizant agency for indirect costs of specific concerns (*i.e.*, a need to establish special cost rates) which could affect the negotiation process. The cognizant agency for indirect costs must address the concerns of all interested agencies, as appropriate. A pre-negotiation conference may be scheduled among all interested agencies, if necessary. The cognizant agency for indirect costs must then arrange a negotiation conference with the educational institution.

(2) Other than formal negotiation. The cognizant agency for indirect costs and educational institution may reach an agreement on rates without a formal negotiation conference; for example, through correspondence or use of the simplified method described in this section D of this Appendix.

g. Formalizing determinations and agreements. The cognizant agency for indirect costs must formalize all determinations or agreements reached with an educational institution and provide copies to other agencies having an interest. Determinations should include a description of any adjustments, the actual amount, both dollar and percentage adjusted, and the reason for making adjustments.

h. Disputes and disagreements. Where the cognizant agency for indirect costs is unable to reach agreement with an educational institution with regard to rates or audit resolution, the appeal system of the cognizant agency for indirect costs must be followed for resolution of the disagreement.

12. Standard Format for Submission

For facilities and administrative (indirect (F&A)) rate proposals, educational institutions must use the standard format, shown in section E of this appendix, to submit their indirect (F&A) rate proposal to the cognizant agency for indirect costs. The cognizant agency for indirect costs may, on an institution-by-institution basis, grant exceptions from all or portions of Part II of the standard format requirement. This requirement does not apply to educational institutions that use the simplified method for calculating indirect (F&A) rates, as described in Section D of this Appendix.

As provided in section C.10, each F&A cost rate negotiation or determination must include development of a rate for each F&A cost pool as well as the overall F&A rate.

D. Simplified Method for Small Institutions

1. General

a. Where the total direct cost of work covered by this part 75 at an institution does not exceed \$10 million in a fiscal year, the simplified procedure described in subsections 2 or 3 may be used in determining allowable indirect (F&A) costs. Under this simplified procedure, the institution's most recent annual financial report and immediately available supporting information must be utilized as a basis for determining the indirect (F&A) cost rate applicable to all Federal awards. The institution may use either the salaries and wages (see subsection 2) or modified total direct costs (see subsection 3) as the distribution basis.

b. The simplified procedure should not be used where it produces results which appear inequitable to the Federal Government or the institution. In any such case, indirect (F&A) costs should be determined through use of the regular procedure.

2. Simplified Procedure—Salaries and Wages Base

a. Establish the total amount of salaries and wages paid to all employees of the institution.

b. Establish an indirect (F&A) cost pool consisting of the expenditures (exclusive of capital items and other costs specifically identified as unallowable) which customarily are classified under the following titles or their equivalents:

(1) General administration and general expenses (exclusive of costs of student administration and services, student activities, student aid, and scholarships).

(2) Operation and maintenance of physical plant and depreciation (after appropriate adjustment for costs applicable to other institutional activities).

(3) Library.

(4) Department administration expenses, which will be computed as 20 percent of the salaries and expenses of deans and heads of departments.

In those cases where expenditures classified under subsection (1) have previously been allocated to other institutional activities, they may be included in the indirect (F&A) cost pool. The total amount of salaries and wages included in the indirect (F&A) cost pool must be separately identified.

c. Establish a salary and wage distribution base, determined by deducting from the total of salaries and wages as established in subsection a. from the amount of salaries and wages included under subsection b.

d. Establish the indirect (F&A) cost rate, determined by dividing the amount in the indirect (F&A) cost pool, subsection b, by the amount of the distribution base, subsection c.

e. Apply the indirect (F&A) cost rate to direct salaries and wages for individual agreements to determine the amount of indirect (F&A) costs allocable to such agreements.

3. Simplified Procedure—Modified Total Direct Cost Base

a. Establish the total costs incurred by the institution for the base period.

b. Establish an indirect (F&A) cost pool consisting of the expenditures (exclusive of capital items and other costs specifically identified as unallowable) which customarily are classified under the following titles or their equivalents:

(1) General administration and general expenses (exclusive of costs of student administration and services, student activities, student aid, and scholarships).

(2) Operation and maintenance of physical plant and depreciation (after appropriate adjustment for costs applicable to other institutional activities).

(3) Library.

(4) Department administration expenses, which will be computed as 20 percent of the salaries and expenses of deans and heads of departments. In those cases where expenditures classified under subsection (1) have previously been allocated to other institutional activities, they may be included in the indirect (F&A) cost pool. The modified total direct costs amount included in the indirect (F&A) cost pool must be separately identified.

c. Establish a modified total direct cost distribution base, as defined in Section C.2, that consists of all institution's direct functions.

d. Establish the indirect (F&A) cost rate, determined by dividing the amount in the indirect (F&A) cost pool, subsection b, by the amount of the distribution base, subsection c.

e. Apply the indirect (F&A) cost rate to the modified total direct costs for individual agreements to determine the amount of indirect (F&A) costs allocable to such agreements.

E. Documentation Requirements

The standard format for documentation requirements for indirect (indirect (F&A)) rate proposals for claiming costs under the regular method is available on the OMB Web site here: http://www.whitehouse.gov/omb/grants_forms.

F. Certification

1. Certification of Charges

To assure that expenditures for Federal awards are proper and in accordance with the agreement documents and approved project budgets, the annual and/or final fiscal reports or vouchers requesting payment under the agreements will include a certification, signed by an authorized official of the university, which reads "By signing this report, I certify to the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and intent set forth in the award documents. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (U.S. Code, Title 18, Section 1001 and Title 31, Sections 3729-3733 and 3801-3812)".

2. Certification of Indirect (F&A) Costs

a. *Policy.* Cognizant agencies must not accept a proposed indirect cost rate unless such costs have been certified by the educational institution using the Certificate of indirect (F&A) Costs set forth in subsection F.2.c

b. The certificate must be signed on behalf of the institution by the chief financial officer or an individual designated by an individual at a level no lower than vice president or chief financial officer.

An indirect (F&A) cost rate is not binding upon the Federal Government if the most recent required proposal from the institution has not been certified. Where it is necessary to establish indirect (F&A) cost rates, and the institution has not submitted a certified proposal for establishing such rates in accordance with the requirements of this section, the Federal Government must unilaterally establish such rates. Such rates may be based upon audited historical data or such other data that have been furnished to the cognizant agency for indirect costs and for which it can be demonstrated that all unallowable costs have been excluded. When indirect (F&A) cost rates are unilaterally established by the Federal Government because of failure of the institution to submit a certified proposal for establishing such rates in accordance with this section, the rates established will be set at a level low enough to ensure that potentially unallowable costs will not be reimbursed.

c. *Certificate*. The certificate required by this section must be in the following form:

Certificate of Indirect (F&A) Costs

This is to certify that to the best of my knowledge and belief:

(1) I have reviewed the indirect (F&A) cost proposal submitted herewith;

(2) All costs included in this proposal [identify date] to establish billing or final indirect (F&A) costs rate for [identify period covered by rate] are allowable in accordance with the requirements of the Federal agreement(s) to which they apply and with the cost principles applicable to those agreements.

(3) This proposal does not include any costs which are unallowable under applicable cost principles such as (without limitation): public relations costs, contributions and donations, entertainment costs, fines and penalties, lobbying costs, and defense of fraud proceedings; and

(4) All costs included in this proposal are properly allocable to Federal agreements on the basis of a beneficial or causal relationship between the expenses incurred and the agreements to which they are allocated in accordance with applicable requirements.

I declare that the foregoing is true and correct.

Institution of Higher Education:

Signature:

Name of Official:

Title:

Date of Execution:

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3018, Jan. 20, 2016]

Appendix IV to Part 75—Indirect (F&A) Costs Identification and Assignment, and Rate Determination for Nonprofit Organizations

A. General

1. Indirect costs are those that have been incurred for common or joint objectives and cannot be readily identified with a particular final cost objective. Direct cost of minor amounts may be treated as indirect costs under the conditions described in §75.413(d). After direct costs have been determined and assigned directly to awards or other work as appropriate, indirect costs are those remaining to be allocated to benefitting cost objectives. A cost may not be allocated to a Federal award as an indirect cost if any other cost incurred for the same purpose, in like circumstances, has been assigned to a Federal award as a direct cost.

2. "Major nonprofit organizations" are defined in §75.414(a). See indirect cost rate reporting requirements in sections B.2.e and B.3.g. of this appendix

B. Allocation of Indirect Costs and Determination of Indirect Cost Rates

1. General

a. If a nonprofit organization has only one major function, or where all its major functions benefit from its indirect costs to approximately the same degree, the allocation of indirect costs and the computation of an indirect cost rate may be accomplished through simplified allocation procedures, as described in section B.2 of this Appendix.

b. If an organization has several major functions which benefit from its indirect costs in varying degrees, allocation of indirect costs may require the accumulation of such costs into separate cost groupings which then are allocated individually to benefitting functions by means of a base which best measures the relative degree of benefit. The indirect costs allocated to each function are then distributed to individual Federal awards and other activities included in that function by means of an indirect cost rate(s).

c. The determination of what constitutes an organization's major functions will depend on its purpose in being; the types of services it renders to the public, its clients, and its members; and the amount of effort it devotes to such activities as fundraising, public information and membership activities.

d. Specific methods for allocating indirect costs and computing indirect cost rates along with the conditions under which each method should be used are described in section B.2 through B.5 of this Appendix.

e. The base period for the allocation of indirect costs is the period in which such costs are incurred and accumulated for allocation to work performed in that period. The base period normally should coincide with the organization's fiscal year but, in any event, must be so selected as to avoid inequities in the allocation of the costs.

2. Simplified Allocation Method

a. Where an organization's major functions benefit from its indirect costs to approximately the same degree, the allocation of indirect costs may be accomplished by (i) separating the organization's total costs for the base period as either direct or indirect, and (ii) dividing the total allowable indirect costs (net of applicable credits) by an equitable distribution base. The result of this process is an indirect cost rate which is used to distribute indirect costs to individual Federal awards. The rate should be expressed as the percentage which the total amount of allowable indirect costs bears to the base selected. This method should also be used where an organization has only one major function encompassing a number of individual projects or activities, and may be used where the level of Federal awards to an organization is relatively small.

b. Both the direct costs and the indirect costs must exclude capital expenditures and unallowable costs. However, unallowable costs which represent activities must be included in the direct costs under the conditions described in §75.413(e).

c. The distribution base may be total direct costs (excluding capital expenditures and other distorting items, such as subawards for \$25,000 or more), direct salaries and wages, or other base which results in an equitable distribution. The distribution base must exclude participant support costs as defined in §75.2.

d. Except where a special rate(s) is required in accordance with section B.5 of this Appendix, the indirect cost rate developed under the above principles is applicable to all Federal awards of the organization. If a special rate(s) is required, appropriate modifications must be made in order to develop the special rate(s).

e. For an organization that receives more than \$10 million in direct Federal funding in a fiscal year, a breakout of the indirect cost component into two broad categories, Facilities and Administration as defined in §75.414(a), is required. The rate in each case must be stated as the percentage which the

amount of the particular indirect cost category (*i.e.*, Facilities or Administration) is of the distribution base identified with that category.

3. Multiple Allocation Base Method

a. General. Where an organization's indirect costs benefit its major functions in varying degrees, indirect costs must be accumulated into separate cost groupings, as described in subparagraph b. Each grouping must then be allocated individually to benefitting functions by means of a base which best measures the relative benefits. The default allocation bases by cost pool are described in section B.3.c of this Appendix.

b. Identification of indirect costs. Cost groupings must be established so as to permit the allocation of each grouping on the basis of benefits provided to the major functions. Each grouping must constitute a pool of expenses that are of like character in terms of functions they benefit and in terms of the allocation base which best measures the relative benefits provided to each function. The groupings are classified within the two broad categories: "Facilities" and "Administration," as described in section A.3 of this Appendix. The indirect cost pools are defined as follows:

(1) Depreciation. The expenses under this heading are the portion of the costs of the organization's buildings, capital improvements to land and buildings, and equipment which are computed in accordance with §75.436 .

(2) Interest. Interest on debt associated with certain buildings, equipment and capital improvements are computed in accordance with §75.449.

(3) Operation and maintenance expenses. The expenses under this heading are those that have been incurred for the administration, operation, maintenance, preservation, and protection of the organization's physical plant. They include expenses normally incurred for such items as: janitorial and utility services; repairs and ordinary or normal alterations of buildings, furniture and equipment; care of grounds; maintenance and operation of buildings and other plant facilities; security; earthquake and disaster preparedness; environmental safety; hazardous waste disposal; property, liability and other insurance relating to property; space and capital leasing; facility planning and management; and central receiving. The operation and maintenance expenses category must also include its allocable share of fringe benefit costs, depreciation, and interest costs.

(4) General administration and general expenses. The expenses under this heading are those that have been incurred for the overall general executive and administrative offices of the organization and other expenses of a general nature which do not relate solely to any major function of the organization. This category must also include its allocable share of fringe benefit costs, operation and maintenance expense, depreciation, and interest costs. Examples of this category include central offices, such as the director's office, the office of finance, business services, budget and planning, personnel, safety and risk management, general counsel, management information systems, and library costs.

In developing this cost pool, special care should be exercised to ensure that costs incurred for the same purpose in like circumstances are treated consistently as either direct or indirect costs. For example, salaries of technical staff, project supplies, project publication, telephone toll charges, computer costs, travel costs, and specialized services costs must be treated as direct costs wherever identifiable to a particular program. The salaries and wages of administrative and pooled clerical staff should normally be treated as indirect costs. Direct charging of these costs may be appropriate as described in §75.413. Items such as office supplies, postage, local telephone costs, periodicals and memberships should normally be treated as indirect costs.

c. Allocation bases. Actual conditions must be taken into account in selecting the base to be used in allocating the expenses in each grouping to benefitting functions. The essential consideration in selecting

a method or a base is that it is the one best suited for assigning the pool of costs to cost objectives in accordance with benefits derived; a traceable cause and effect relationship; or logic and reason, where neither the cause nor the effect of the relationship is determinable. When an allocation can be made by assignment of a cost grouping directly to the function benefitted, the allocation must be made in that manner. When the expenses in a cost grouping are more general in nature, the allocation must be made through the use of a selected base which produces results that are equitable to both the Federal Government and the organization. The distribution must be made in accordance with the bases described herein unless it can be demonstrated that the use of a different base would result in a more equitable allocation of the costs, or that a more readily available base would not increase the costs charged to Federal awards. The results of special cost studies (such as an engineering utility study) must not be used to determine and allocate the indirect costs to Federal awards.

(1) Depreciation. Depreciation expenses must be allocated in the following manner:

(a) Depreciation on buildings used exclusively in the conduct of a single function, and on capital improvements and equipment used in such buildings, must be assigned to that function.

(b) Depreciation on buildings used for more than one function, and on capital improvements and equipment used in such buildings, must be allocated to the individual functions performed in each building on the basis of usable square feet of space, excluding common areas, such as hallways, stairwells, and restrooms.

(c) Depreciation on buildings, capital improvements and equipment related space (*e.g.*, individual rooms, and laboratories) used jointly by more than one function (as determined by the users of the space) must be treated as follows. The cost of each jointly used unit of space must be allocated to the benefitting functions on the basis of:

(i) the employees and other users on a full-time equivalent (FTE) basis or salaries and wages of those individual functions benefitting from the use of that space; or

(ii) organization-wide employee FTEs or salaries and wages applicable to the benefitting functions of the organization.

(d) Depreciation on certain capital improvements to land, such as paved parking areas, fences, sidewalks, and the like, not included in the cost of buildings, must be allocated to user categories on a FTE basis and distributed to major functions in proportion to the salaries and wages of all employees applicable to the functions.

(2) Interest. Interest costs must be allocated in the same manner as the depreciation on the buildings, equipment and capital equipment to which the interest relates.

(3) Operation and maintenance expenses. Operation and maintenance expenses must be allocated in the same manner as the depreciation.

(4) General administration and general expenses. General administration and general expenses must be allocated to benefitting functions based on modified total costs (MTC). The MTC is the modified total direct costs (MTDC), as described in §75.2, plus the allocated indirect cost proportion. The expenses included in this category could be grouped first according to major functions of the organization to which they render services or provide benefits. The aggregate expenses of each group must then be allocated to benefitting functions based on MTC.

d. Order of distribution.

(1) Indirect cost categories consisting of depreciation, interest, operation and maintenance, and general administration and general expenses must be allocated in that order to the remaining indirect cost categories as well as to the major functions of the organization. Other cost categories should be allocated in the order determined to be most appropriate by the organization. This order of allocation does not apply if cross allocation of costs is made as provided in section B.3.d.2 of this Appendix.

(2) Normally, an indirect cost category will be considered closed once it has been allocated to other cost objectives, and costs must not be subsequently allocated to it. However, a cross allocation of costs between two or more indirect costs categories could be used if such allocation will result in a more equitable allocation of costs. If a cross allocation is used, an appropriate modification to the composition of the indirect cost categories is required.

e. Application of indirect cost rate or rates. Except where a special indirect cost rate(s) is required in accordance with section B.5 of this Appendix, the separate groupings of indirect costs allocated to each major function must be aggregated and treated as a common pool for that function. The costs in the common pool must then be distributed to individual Federal awards included in that function by use of a single indirect cost rate.

f. Distribution basis. Indirect costs must be distributed to applicable Federal awards and other benefitting activities within each major function on the basis of MTDC (see definition in §75.2).

g. Individual Rate Components. An indirect cost rate must be determined for each separate indirect cost pool developed. The rate in each case must be stated as the percentage which the amount of the particular indirect cost pool is of the distribution base identified with that pool. Each indirect cost rate negotiation or determination agreement must include development of the rate for each indirect cost pool as well as the overall indirect cost rate. The indirect cost pools must be classified within two broad categories: "Facilities" and "Administration," as described in §75.414(a).

4. Direct Allocation Method

a. Some nonprofit organizations treat all costs as direct costs except general administration and general expenses. These organizations generally separate their costs into three basic categories: (i) General administration and general expenses, (ii) fundraising, and (iii) other direct functions (including projects performed under Federal awards). Joint costs, such as depreciation, rental costs, operation and maintenance of facilities, telephone expenses, and the like are prorated individually as direct costs to each category and to each Federal award or other activity using a base most appropriate to the particular cost being prorated.

b. This method is acceptable, provided each joint cost is prorated using a base which accurately measures the benefits provided to each Federal award or other activity. The bases must be established in accordance with reasonable criteria, and be supported by current data. This method is compatible with the Standards of Accounting and Financial Reporting for Voluntary Health and Welfare Organizations issued jointly by the National Health Council, Inc., the National Assembly of Voluntary Health and Social Welfare Organizations, and the United Way of America.

c. Under this method, indirect costs consist exclusively of general administration and general expenses. In all other respects, the organization's indirect cost rates must be computed in the same manner as that described in section B.2 of this Appendix.

5. Special Indirect Cost Rates

In some instances, a single indirect cost rate for all activities of an organization or for each major function of the organization may not be appropriate, since it would not take into account those different factors which may substantially affect the indirect costs applicable to a particular segment of work. For

this purpose, a particular segment of work may be that performed under a single Federal award or it may consist of work under a group of Federal awards performed in a common environment. These factors may include the physical location of the work, the level of administrative support required, the nature of the facilities or other resources employed, the scientific disciplines or technical skills involved, the organizational arrangements used, or any combination thereof. When a particular segment of work is performed in an environment which appears to generate a significantly different level of indirect costs, provisions should be made for a separate indirect cost pool applicable to such work. The separate indirect cost pool should be developed during the course of the regular allocation process, and the separate indirect cost rate resulting therefrom should be used, provided it is determined that (i) the rate differs significantly from that which would have been obtained under sections B.2, B.3, and B.4 of this Appendix, and (ii) the volume of work to which the rate would apply is material.

C. Negotiation and Approval of Indirect Cost Rates

1. Definitions

As used in this section, the following terms have the meanings set forth in this section:

- a. *Cognizant agency for indirect costs* means the Federal agency responsible for negotiating and approving indirect cost rates for a nonprofit organization on behalf of all Federal agencies.
- b. *Predetermined rate* means an indirect cost rate, applicable to a specified current or future period, usually the organization's fiscal year. The rate is based on an estimate of the costs to be incurred during the period. A predetermined rate is not subject to adjustment.
- c. *Fixed rate* means an indirect cost rate which has the same characteristics as a predetermined rate, except that the difference between the estimated costs and the actual costs of the period covered by the rate is carried forward as an adjustment to the rate computation of a subsequent period.
- d. *Final rate* means an indirect cost rate applicable to a specified past period which is based on the actual costs of the period. A final rate is not subject to adjustment.
- e. *Provisional rate or billing rate* means a temporary indirect cost rate applicable to a specified period which is used for funding, interim reimbursement, and reporting indirect costs on Federal awards pending the establishment of a final rate for the period.
- f. *Indirect cost proposal* means the documentation prepared by an organization to substantiate its claim for the reimbursement of indirect costs. This proposal provides the basis for the review and negotiation leading to the establishment of an organization's indirect cost rate.
- g. *Cost objective* means a function, organizational subdivision, contract, Federal award, or other work unit for which cost data are desired and for which provision is made to accumulate and measure the cost of processes, projects, jobs and capitalized projects.

2. Negotiation and Approval of Rates

- a. Unless different arrangements are agreed to by the Federal agencies concerned, the Federal agency with the largest dollar value of Federal awards with an organization will be designated as the cognizant agency for indirect costs for the negotiation and approval of the indirect cost rates and, where necessary, other rates such as fringe benefit and computer charge-out rates. Once an agency is assigned cognizance for a particular nonprofit organization, the assignment will not be changed unless there is a shift in the dollar volume of the Federal awards to the organization for at least three years. All concerned Federal agencies must be given the opportunity to participate in the negotiation process but, after a rate has been agreed upon, it will be accepted by all Federal agencies. When a Federal agency has reason to

believe that special operating factors affecting its Federal awards necessitate special indirect cost rates in accordance with section B.5 of this Appendix, it will, prior to the time the rates are negotiated, notify the cognizant agency for indirect costs. (See also §75.414.) Where a non-Federal entity only receives funds as a subrecipient, see the requirements of §75.352.

b. Except as otherwise provided in §75.414(f), a nonprofit organization which has not previously established an indirect cost rate with a Federal agency must submit its initial indirect cost proposal immediately after the organization is advised that a Federal award will be made and, in no event, later than three months after the effective date of the Federal award.

c. Unless approved by the cognizant agency for indirect costs in accordance with §75.414(g), organizations that have previously established indirect cost rates must submit a new indirect cost proposal to the cognizant agency for indirect costs within six months after the close of each fiscal year.

d. A predetermined rate may be negotiated for use on Federal awards where there is reasonable assurance, based on past experience and reliable projection of the organization's costs, that the rate is not likely to exceed a rate based on the organization's actual costs.

e. Fixed rates may be negotiated where predetermined rates are not considered appropriate. A fixed rate, however, must not be negotiated if (i) all or a substantial portion of the organization's Federal awards are expected to expire before the carry-forward adjustment can be made; (ii) the mix of Federal and non-Federal work at the organization is too erratic to permit an equitable carry-forward adjustment; or (iii) the organization's operations fluctuate significantly from year to year.

f. Provisional and final rates must be negotiated where neither predetermined nor fixed rates are appropriate. Predetermined or fixed rates may replace provisional rates at any time prior to the close of the organization's fiscal year. If that event does not occur, a final rate will be established and upward or downward adjustments will be made based on the actual allowable costs incurred for the period involved.

g. The results of each negotiation must be formalized in a written agreement between the cognizant agency for indirect costs and the nonprofit organization. The cognizant agency for indirect costs must make available copies of the agreement to all concerned Federal agencies.

h. If a dispute arises in a negotiation of an indirect cost rate between the cognizant agency for indirect costs and the nonprofit organization, the dispute must be resolved in accordance with the appeals procedures of the cognizant agency for indirect costs.

i. To the extent that problems are encountered among the Federal agencies in connection with the negotiation and approval process, OMB will lend assistance as required to resolve such problems in a timely manner.

D. Certification of Indirect (F&A) Costs

1. Required Certification. No proposal to establish indirect (F&A) cost rates must be acceptable unless such costs have been certified by the non-profit organization using the Certificate of Indirect (F&A) Costs set forth in subsection 2., below. The certificate must be signed on behalf of the organization by an individual at a level no lower than vice president or chief financial officer for the organization.

2. Each indirect cost rate proposal must be accompanied by a certification in the following form:

Certificate of Indirect (F&A) Costs

This is to certify that to the best of my knowledge and belief:

(1) I have reviewed the indirect (F&A) cost proposal submitted herewith;

(2) All costs included in this proposal [identify date] to establish billing or final indirect (F&A) costs rate for [identify period covered by rate] are allowable in accordance with the requirements of the Federal awards to which they apply and with Subpart E of part 75.

(3) This proposal does not include any costs which are unallowable under Subpart E of part 75 such as (without limitation): public relations costs, contributions and donations, entertainment costs, fines and penalties, lobbying costs, and defense of fraud proceedings; and

(4) All costs included in this proposal are properly allocable to Federal awards on the basis of a beneficial or causal relationship between the expenses incurred and the Federal awards to which they are allocated in accordance with applicable requirements.

I declare that the foregoing is true and correct.

Nonprofit Organization:

Signature:

Name of Official:

Title:

Date of Execution:

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3018, Jan. 20, 2016]

Appendix V to Part 75—State/Local Governmentwide Central Service Cost Allocation Plans

A. General

1. Most governmental units provide certain services, such as motor pools, computer centers, purchasing, accounting, etc., to operating agencies on a centralized basis. Since federally-supported awards are performed within the individual operating agencies, there needs to be a process whereby these central service costs can be identified and assigned to benefitted activities on a reasonable and consistent basis. The central service cost allocation plan provides that process. All costs and other data used to distribute the costs included in the plan should be supported by formal accounting and other records that will support the propriety of the costs assigned to Federal awards.

2. Guidelines and illustrations of central service cost allocation plans are provided in a brochure published by the Department of Health and Human Services entitled "*A Guide for State, Local and Indian Tribal Governments: Cost Principles and Procedures for Developing Cost Allocation Plans and Indirect Cost Rates for Agreements with the Federal Government.*" A copy of this brochure may be obtained from the HHS' Cost Allocation Services or at their Web site at <https://rates.psc.gov>.

B. Definitions

1. *Agency or operating agency* means an organizational unit or sub-division within a governmental unit that is responsible for the performance or administration of Federal awards or activities of the governmental unit.

2. *Allocated central services* means central services that benefit operating agencies but are not billed to the agencies on a fee-for-service or similar basis. These costs are allocated to benefitted agencies on some reasonable basis. Examples of such services might include general accounting, personnel administration, purchasing, etc.

3. *Billed central services* means central services that are billed to benefitted agencies or programs on an individual fee-for-service or similar basis. Typical examples of billed central services include computer services, transportation services, insurance, and fringe benefits.

4. *Cognizant agency for indirect costs* is defined in §75.2. The determination of cognizant agency for indirect costs for states and local governments is described in section F.1.

5. *Major local government* means local government that receives more than \$100 million in direct Federal awards subject to this part.

C. Scope of the Central Service Cost Allocation Plans

The central service cost allocation plan will include all central service costs that will be claimed (either as a billed or an allocated cost) under Federal awards and will be documented as described in section E. Costs of central services omitted from the plan will not be reimbursed.

D. Submission Requirements

1. Each state will submit a plan to the Department of Health and Human Services for each year in which it claims central service costs under Federal awards. The plan should include (a) a projection of the next year's allocated central service cost (based either on actual costs for the most recently completed year or the budget projection for the coming year), and (b) a reconciliation of actual allocated central service costs to the estimated costs used for either the most recently completed year or the year immediately preceding the most recently completed year.

2. Each major local government is also required to submit a plan to its cognizant agency for indirect costs annually.

3. All other local governments claiming central service costs must develop a plan in accordance with the requirements described in this Part and maintain the plan and related supporting documentation for audit. These local governments are not required to submit their plans for Federal approval unless they are specifically requested to do so by the cognizant agency for indirect costs. Where a local government only receives funds as a subrecipient, the pass-through entity will be responsible for monitoring the subrecipient's plan.

4. All central service cost allocation plans will be prepared and, when required, submitted within six months prior to the beginning of each of the governmental unit's fiscal years in which it proposes to claim central service costs. Extensions may be granted by the cognizant agency for indirect costs on a case-by-case basis.

E. Documentation Requirements for Submitted Plans

The documentation requirements described in this section may be modified, expanded, or reduced by the cognizant agency for indirect costs on a case-by-case basis. For example, the requirements may be reduced for those central services which have little or no impact on Federal awards. Conversely, if a review of a plan indicates that certain additional information is needed, and will likely be needed in future years, it may be routinely requested in future plan submissions. Items marked with an asterisk (*) should be submitted only once; subsequent plans should merely indicate any changes since the last plan.

1. General

All proposed plans must be accompanied by the following: An organization chart sufficiently detailed to show operations including the central service activities of the state/local government whether or not they are shown as benefitting from central service functions; a copy of the Comprehensive Annual Financial Report (or a copy of the Executive Budget if budgeted costs are being proposed) to support the allowable costs of each central service activity included in the plan; and, a certification (see subsection 4.) that the plan was prepared in accordance with this Part, contains only allowable costs, and was prepared in a manner that treated similar costs consistently among the various Federal awards and between Federal and non-Federal awards/activities.

2. Allocated Central Services

For each allocated central service*, the plan must also include the following: a brief description of the service, an identification of the unit rendering the service and the operating agencies receiving the service, the items of expense included in the cost of the service, the method used to distribute the cost of the service to benefitted agencies, and a summary schedule showing the allocation of each service to the specific benefitted agencies. If any self-insurance funds or fringe benefits costs are treated as allocated (rather than billed) central services, documentation discussed in subsections 3.b. and c. must also be included.

3. Billed Services

a. *General.* The information described in this section must be provided for all billed central services, including internal service funds, self-insurance funds, and fringe benefit funds.

b. *Internal service funds.*

(1) For each internal service fund or similar activity with an operating budget of \$5 million or more, the plan must include: A brief description of each service; a balance sheet for each fund based on individual accounts contained in the governmental unit's accounting system; a revenue/expenses statement, with revenues broken out by source, e.g., regular billings, interest earned, etc.; a listing of all non-operating transfers (as defined by Generally Accepted Accounting Principles (GAAP)) into and out of the fund; a description of the procedures (methodology) used to charge the costs of each service to users, including how billing rates are determined; a schedule of current rates; and, a schedule comparing total revenues (including imputed revenues) generated by the service to the allowable costs of the service, as determined under this Part, with an explanation of how variances will be handled.

(2) Revenues must consist of all revenues generated by the service, including unbilled and uncollected revenues. If some users were not billed for the services (or were not billed at the full rate for that class of users), a schedule showing the full imputed revenues associated with these users must be provided. Expenses must be broken out by object cost categories (e.g., salaries, supplies, etc.).

c. *Self-insurance funds.* For each self-insurance fund, the plan must include: The fund balance sheet; a statement of revenue and expenses including a summary of billings and claims paid by agency; a listing of all non-operating transfers into and out of the fund; the type(s) of risk(s) covered by the fund (e.g., automobile liability, workers' compensation, etc.); an explanation of how the level of fund contributions are determined, including a copy of the current actuarial report (with the actuarial assumptions used) if the contributions are determined on an actuarial basis; and, a description of the procedures used to charge or allocate fund contributions to benefitted activities. Reserve levels in excess of claims (1) submitted and adjudicated but not paid, (2) submitted but not adjudicated, and (3) incurred but not submitted must be identified and explained.

d. *Fringe benefits.* For fringe benefit costs, the plan must include: A listing of fringe benefits provided to covered employees, and the overall annual cost of each type of benefit; current fringe benefit policies; and procedures used to charge or allocate the costs of the benefits to benefitted activities. In addition, for pension and post-retirement health insurance plans, the following information must be provided: the governmental unit's funding policies, e.g., legislative bills, trust agreements, or state-mandated contribution rules, if different from actuarially determined rates; the pension plan's costs accrued for the year; the amount funded, and date(s) of funding; a copy of the current actuarial report (including the actuarial assumptions); the plan trustee's report; and, a schedule from the activity showing the value of the interest cost associated with late funding.

4. Required Certification

Each central service cost allocation plan will be accompanied by a certification in the following form:

Certificate of Cost Allocation Plan

This is to certify that I have reviewed the cost allocation plan submitted herewith and to the best of my knowledge and belief:

(1) All costs included in this proposal [identify date] to establish cost allocations or billings for [identify period covered by plan] are allowable in accordance with the requirements of this Part and the Federal award(s) to which they apply. Unallowable costs have been adjusted for in allocating costs as indicated in the cost allocation plan.

(2) All costs included in this proposal are properly allocable to Federal awards on the basis of a beneficial or causal relationship between the expenses incurred and the Federal awards to which they are allocated in accordance with applicable requirements. Further, the same costs that have been treated as indirect costs have not been claimed as direct costs. Similar types of costs have been accounted for consistently.

I declare that the foregoing is true and correct.

Governmental Unit:

Signature:

Name of Official:

Title:

Date of Execution:

F. Negotiation and Approval of Central Service Plans

1. Federal Cognizant Agency for Indirect Costs Assignments for Cost Negotiation

In general, unless different arrangements are agreed to by the concerned Federal agencies, for central service cost allocation plans, the cognizant agency responsible for review and approval is the Federal agency with the largest dollar value of total Federal awards with a governmental unit. For indirect cost rates and departmental indirect cost allocation plans, the cognizant agency is the Federal agency with the largest dollar value of direct Federal awards with a governmental unit or component, as appropriate. Once designated as the cognizant agency for indirect costs, the Federal agency must remain

so for a period of five years. In addition, the following Federal agencies continue to be responsible for the indicated governmental entities:

Department of Health and Human Services—Public assistance and state-wide cost allocation plans for all states (including the District of Columbia and Puerto Rico), state and local hospitals, libraries and health districts.

Department of the Interior—Indian tribal governments, territorial governments, and state and local park and recreational districts.

Department of Labor—State and local labor departments.

Department of Education—School districts and state and local education agencies.

Department of Agriculture—State and local agriculture departments.

Department of Transportation—State and local airport and port authorities and transit districts.

Department of Commerce—State and local economic development districts.

Department of Housing and Urban Development—State and local housing and development districts.

Environmental Protection Agency—State and local water and sewer districts.

2. Review

All proposed central service cost allocation plans that are required to be submitted will be reviewed, negotiated, and approved by the cognizant agency for indirect costs on a timely basis. The cognizant agency for indirect costs will review the proposal within six months of receipt of the proposal and either negotiate/approve the proposal or advise the governmental unit of the additional documentation needed to support/evaluate the proposed plan or the changes required to make the proposal acceptable. Once an agreement with the governmental unit has been reached, the agreement will be accepted and used by all Federal agencies, unless prohibited or limited by statute. Where a Federal awarding agency has reason to believe that special operating factors affecting its Federal awards necessitate special consideration, the funding agency will, prior to the time the plans are negotiated, notify the cognizant agency for indirect costs.

3. Agreement

The results of each negotiation must be formalized in a written agreement between the cognizant agency for indirect costs and the governmental unit. This agreement will be subject to re-opening if the agreement is subsequently found to violate a statute or the information upon which the plan was negotiated is later found to be materially incomplete or inaccurate. The results of the negotiation must be made available to all Federal agencies for their use.

4. Adjustments

Negotiated cost allocation plans based on a proposal later found to have included costs that: (a) Are unallowable (i) as specified by law or regulation, (ii) as identified in subpart F, General Provisions for selected Items of Cost of this Part, or (iii) by the terms and conditions of Federal awards, or (b) are unallowable because they are clearly not allocable to Federal awards, must be adjusted, or a refund must be made at the option of the cognizant agency for indirect costs, including earned or imputed interest

from the date of transfer and debt interest, if applicable, chargeable in accordance with applicable Federal cognizant agency for indirect costs regulations. Adjustments or cash refunds may include, at the option of the cognizant agency for indirect costs, earned or imputed interest from the date of expenditure and delinquent debt interest, if applicable, chargeable in accordance with applicable cognizant agency claims collection regulations. These adjustments or refunds are designed to correct the plans and do not constitute a reopening of the negotiation.

G. Other Policies

1. Billed Central Service Activities

Each billed central service activity must separately account for all revenues (including imputed revenues) generated by the service, expenses incurred to furnish the service, and profit/loss.

2. Working Capital Reserves

Internal service funds are dependent upon a reasonable level of working capital reserve to operate from one billing cycle to the next. Charges by an internal service activity to provide for the establishment and maintenance of a reasonable level of working capital reserve, in addition to the full recovery of costs, are allowable. A working capital reserve as part of retained earnings of up to 60 calendar days cash expenses for normal operating purposes is considered reasonable. A working capital reserve exceeding 60 calendar days may be approved by the cognizant agency for indirect costs in exceptional cases.

3. Carry-Forward Adjustments of Allocated Central Service Costs

Allocated central service costs are usually negotiated and approved for a future fiscal year on a "fixed with carry-forward" basis. Under this procedure, the fixed amounts for the future year covered by agreement are not subject to adjustment for that year. However, when the actual costs of the year involved become known, the differences between the fixed amounts previously approved and the actual costs will be carried forward and used as an adjustment to the fixed amounts established for a later year. This "carry-forward" procedure applies to all central services whose costs were fixed in the approved plan. However, a carry-forward adjustment is not permitted, for a central service activity that was not included in the approved plan, or for unallowable costs that must be reimbursed immediately.

4. Adjustments of Billed Central Services

Billing rates used to charge Federal awards must be based on the estimated costs of providing the services, including an estimate of the allocable central service costs. A comparison of the revenue generated by each billed service (including total revenues whether or not billed or collected) to the actual allowable costs of the service will be made at least annually, and an adjustment will be made for the difference between the revenue and the allowable costs. These adjustments will be made through one of the following adjustment methods: (a) A cash refund including earned or imputed interest from the date of transfer and debt interest, if applicable, chargeable in accordance with applicable Federal cognizant agency for indirect costs regulations to the Federal Government for the Federal share of the adjustment, (b) credits to the amounts charged to the individual programs, (c) adjustments to future billing rates, or (d) adjustments to allocated central service costs. Adjustments to allocated central services will not be permitted where the total amount of the adjustment for a particular service (Federal share and non-Federal) share exceeds \$500,000. Adjustment methods may include, at the option of the cognizant agency, earned or imputed interest from the date of expenditure and delinquent debt interest, if applicable, chargeable in accordance with applicable cognizant agency claims collection regulations.

5. Records Retention

All central service cost allocation plans and related documentation used as a basis for claiming costs under Federal awards must be retained for audit in accordance with the records retention requirements contained in Subpart D of part 75.

6. Appeals

If a dispute arises in the negotiation of a plan between the cognizant agency for indirect costs and the governmental unit, the dispute must be resolved in accordance with the appeals procedures of the cognizant agency for indirect costs.

7. OMB Assistance

To the extent that problems are encountered among the Federal agencies or governmental units in connection with the negotiation and approval process, OMB will lend assistance, as required, to resolve such problems in a timely manner.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3019, Jan. 20, 2016]

Appendix VI to Part 75—Public Assistance Cost Allocation Plans

A. General

Federally-financed programs administered by state public assistance agencies are funded predominately by the Department of Health and Human Services (HHS). In support of its stewardship requirements, HHS has published requirements for the development, documentation, submission, negotiation, and approval of public assistance cost allocation plans in Subpart E of 45 CFR part 95. All administrative costs (direct and indirect) are normally charged to Federal awards by implementing the public assistance cost allocation plan. This Appendix extends these requirements to all Federal awarding agencies whose programs are administered by a state public assistance agency. Major federally-financed programs typically administered by state public assistance agencies include: Temporary Aid for Needy Families (TANF), Medicaid, Food Stamps, Child Support Enforcement, Adoption Assistance and Foster Care, and Social Services Block Grant.

B. Definitions

1. *State public assistance agency* means a state agency administering or supervising the administration of one or more public assistance programs operated by the state as identified in Subpart E of 45 CFR part 95. For the purpose of this Appendix, these programs include all programs administered by the state public assistance agency.

2. *State public assistance agency costs* means all costs incurred by, or allocable to, the state public assistance agency, except expenditures for financial assistance, medical contractor payments, food stamps, and payments for services and goods provided directly to program recipients.

C. Policy

State public assistance agencies will develop, document and implement, and the Federal Government will review, negotiate, and approve, public assistance cost allocation plans in accordance with Subpart E of 45 CFR part 95. The plan will include all programs administered by the state public assistance agency. Where a letter of approval or disapproval is transmitted to a state public assistance agency in accordance with Subpart E, the letter will apply to all Federal agencies and programs. The remaining sections of this Appendix (except for the requirement for certification) summarize the provisions of Subpart E of 45 CFR part 95.

D. Submission, Documentation, and Approval of Public Assistance Cost Allocation Plans

1. State public assistance agencies are required to promptly submit amendments to the cost allocation plan to HHS for review and approval.

2. Under the coordination process outlined in section E, Review of Implementation of Approved Plans, affected Federal agencies will review all new plans and plan amendments and provide comments, as appropriate, to HHS. The effective date of the plan or plan amendment will be the first day of the calendar quarter following the event that required the amendment, unless another date is specifically approved by HHS. HHS, as the cognizant agency for indirect costs acting on behalf of all affected Federal agencies, will, as necessary, conduct negotiations with the state public assistance agency and will inform the state agency of the action taken on the plan or plan amendment.

E. Review of Implementation of Approved Plans

1. Since public assistance cost allocation plans are of a narrative nature, the review during the plan approval process consists of evaluating the appropriateness of the proposed groupings of costs (cost centers) and the related allocation bases. As such, the Federal Government needs some assurance that the cost allocation plan has been implemented as approved. This is accomplished by reviews by the Federal awarding agencies, single audits, or audits conducted by the cognizant agency for indirect costs.

2. Where inappropriate charges affecting more than one Federal awarding agency are identified, the cognizant HHS cost negotiation office will be advised and will take the lead in resolving the issue(s) as provided for in Subpart E of 45 CFR part 95.

3. If a dispute arises in the negotiation of a plan or from a disallowance involving two or more Federal awarding agencies, the dispute must be resolved in accordance with the appeals procedures set out in 45 CFR part 16. Disputes involving only one Federal awarding agency will be resolved in accordance with the Federal awarding agency's appeal process.

4. To the extent that problems are encountered among the Federal awarding agencies or governmental units in connection with the negotiation and approval process, the Office of Management and Budget will lend assistance, as required, to resolve such problems in a timely manner.

F. Unallowable Costs

Claims developed under approved cost allocation plans will be based on allowable costs as identified in this Part. Where unallowable costs have been claimed and reimbursed, they will be refunded to the program that reimbursed the unallowable cost using one of the following methods: (a) A cash refund, (b) offset to a subsequent claim, or (c) credits to the amounts charged to individual Federal awards. Cash refunds, offsets, and credits may include at the option of the cognizant agency for indirect cost, earned or imputed interest from the date of expenditure and delinquent debt interest, if applicable, chargeable in accordance with applicable cognizant agency for indirect cost claims collection regulations.

Appendix VII to Part 75—States and Local Government and Indian Tribe Indirect Cost Proposals

A. General

1. Indirect costs are those that have been incurred for common or joint purposes. These costs benefit more than one cost objective and cannot be readily identified with a particular final cost objective without effort disproportionate to the results achieved. After direct costs have been determined and assigned directly to Federal awards and other activities as appropriate, indirect costs are those remaining to be allocated to benefitted cost objectives. A cost may not be allocated to a Federal award as an

indirect cost if any other cost incurred for the same purpose, in like circumstances, has been assigned to a Federal award as a direct cost.

2. Indirect costs include (a) the indirect costs originating in each department or agency of the governmental unit carrying out Federal awards and (b) the costs of central governmental services distributed through the central service cost allocation plan (as described in Appendix V to part) and not otherwise treated as direct costs.

3. Indirect costs are normally charged to Federal awards by the use of an indirect cost rate. A separate indirect cost rate(s) is usually necessary for each department or agency of the governmental unit claiming indirect costs under Federal awards. Guidelines and illustrations of indirect cost proposals are provided in a brochure published by the Department of Health and Human Services entitled "*A Guide for States and Local Government Agencies: Cost Principles and Procedures for Establishing Cost Allocation Plans and Indirect Cost Rates for Grants and Contracts with the Federal Government.*" A copy of this brochure may be obtained from the HHS' Cost Allocation Services or at their Web site at <https://rates.psc.gov>.

4. Because of the diverse characteristics and accounting practices of governmental units, the types of costs which may be classified as indirect costs cannot be specified in all situations. However, typical examples of indirect costs may include certain state/local-wide central service costs, general administration of the non-Federal entity accounting and personnel services performed within the non-Federal entity, depreciation on buildings and equipment, the costs of operating and maintaining facilities.

5. This Appendix does not apply to state public assistance agencies. These agencies should refer instead to Appendix VI to part 75.

B. Definitions

1. *Base* means the accumulated direct costs (normally either total direct salaries and wages or total direct costs exclusive of any extraordinary or distorting expenditures) used to distribute indirect costs to individual Federal awards. The direct cost base selected should result in each Federal award bearing a fair share of the indirect costs in reasonable relation to the benefits received from the costs.

2. *Base period* for the allocation of indirect costs is the period in which such costs are incurred and accumulated for allocation to activities performed in that period. The base period normally should coincide with the governmental unit's fiscal year, but in any event, must be so selected as to avoid inequities in the allocation of costs.

3. *Cognizant agency for indirect costs* means the Federal agency responsible for reviewing and approving the governmental unit's indirect cost rate(s) on the behalf of the Federal Government. The cognizant agency for indirect costs assignment is described in Appendix V, section F.

4. *Final rate* means an indirect cost rate applicable to a specified past period which is based on the actual allowable costs of the period. A final audited rate is not subject to adjustment.

5. *Fixed rate* means an indirect cost rate which has the same characteristics as a predetermined rate, except that the difference between the estimated costs and the actual, allowable costs of the period covered by the rate is carried forward as an adjustment to the rate computation of a subsequent period.

6. *Indirect cost pool* is the accumulated costs that jointly benefit two or more programs or other cost objectives.

7. *Indirect cost rate* is a device for determining in a reasonable manner the proportion of indirect costs each program should bear. It is the ratio (expressed as a percentage) of the indirect costs to a direct cost base.

8. *Indirect cost rate proposal* means the documentation prepared by a governmental unit or subdivision thereof to substantiate its request for the establishment of an indirect cost rate.

9. *Predetermined rate* means an indirect cost rate, applicable to a specified current or future period, usually the governmental unit's fiscal year. This rate is based on an estimate of the costs to be incurred during the period. Except under very unusual circumstances, a predetermined rate is not subject to adjustment. (Because of legal constraints, predetermined rates are not permitted for Federal contracts; they may, however, be used for grants or cooperative agreements.) Predetermined rates may not be used by governmental units that have not submitted and negotiated the rate with the cognizant agency for indirect costs. In view of the potential advantages offered by this procedure, negotiation of predetermined rates for indirect costs for a period of two to four years should be the norm in those situations where the cost experience and other pertinent facts available are deemed sufficient to enable the parties involved to reach an informed judgment as to the probable level of indirect costs during the ensuing accounting periods.

10. *Provisional rate* means a temporary indirect cost rate applicable to a specified period which is used for funding, interim reimbursement, and reporting indirect costs on Federal awards pending the establishment of a "final" rate for that period.

C. Allocation of Indirect Costs and Determination of Indirect Cost Rates

1. General

a. Where a governmental unit's department or agency has only one major function, or where all its major functions benefit from the indirect costs to approximately the same degree, the allocation of indirect costs and the computation of an indirect cost rate may be accomplished through simplified allocation procedures as described in subsection 2.

b. Where a governmental unit's department or agency has several major functions which benefit from its indirect costs in varying degrees, the allocation of indirect costs may require the accumulation of such costs into separate cost groupings which then are allocated individually to benefitted functions by means of a base which best measures the relative degree of benefit. The indirect costs allocated to each function are then distributed to individual Federal awards and other activities included in that function by means of an indirect cost rate(s).

c. Specific methods for allocating indirect costs and computing indirect cost rates along with the conditions under which each method should be used are described in subsections 2, 3 and 4.

2. Simplified Method

a. Where a non-Federal entity's major functions benefit from its indirect costs to approximately the same degree, the allocation of indirect costs may be accomplished by (1) classifying the non-Federal entity's total costs for the base period as either direct or indirect, and (2) dividing the total allowable indirect costs (net of applicable credits) by an equitable distribution base. The result of this process is an indirect cost rate which is used to distribute indirect costs to individual Federal awards. The rate should be expressed as the percentage which the total amount of allowable indirect costs bears to the base selected. This method should also be used where a governmental unit's department or agency has only one major function encompassing a number of individual projects or activities, and may be used where the level of Federal awards to that department or agency is relatively small.

b. Both the direct costs and the indirect costs must exclude capital expenditures and unallowable costs. However, unallowable costs must be included in the direct costs if they represent activities to which indirect costs are properly allocable.

c. The distribution base may be (1) total direct costs (excluding capital expenditures and other distorting items, such as pass-through funds, subawards in excess of \$25,000, participant support costs, etc.), (2) direct salaries and wages, or (3) another base which results in an equitable distribution.

3. Multiple Allocation Base Method

a. Where a non-Federal entity's indirect costs benefit its major functions in varying degrees, such costs must be accumulated into separate cost groupings. Each grouping must then be allocated individually to benefitted functions by means of a base which best measures the relative benefits.

b. The cost groupings should be established so as to permit the allocation of each grouping on the basis of benefits provided to the major functions. Each grouping should constitute a pool of expenses that are of like character in terms of the functions they benefit and in terms of the allocation base which best measures the relative benefits provided to each function. The number of separate groupings should be held within practical limits, taking into consideration the materiality of the amounts involved and the degree of precision needed.

c. Actual conditions must be taken into account in selecting the base to be used in allocating the expenses in each grouping to benefitted functions. When an allocation can be made by assignment of a cost grouping directly to the function benefitted, the allocation must be made in that manner. When the expenses in a grouping are more general in nature, the allocation should be made through the use of a selected base which produces results that are equitable to both the Federal Government and the governmental unit. In general, any cost element or related factor associated with the governmental unit's activities is potentially adaptable for use as an allocation base provided that: (1) It can readily be expressed in terms of dollars or other quantitative measures (total direct costs, direct salaries and wages, staff hours applied, square feet used, hours of usage, number of documents processed, population served, and the like), and (2) it is common to the benefitted functions during the base period.

d. Except where a special indirect cost rate(s) is required in accordance with paragraph (C)(4) of this Appendix, the separate groupings of indirect costs allocated to each major function must be aggregated and treated as a common pool for that function. The costs in the common pool must then be distributed to individual Federal awards included in that function by use of a single indirect cost rate.

e. The distribution base used in computing the indirect cost rate for each function may be (1) total direct costs (excluding capital expenditures and other distorting items such as pass-through funds, subawards in excess of \$25,000, participant support costs, etc.), (2) direct salaries and wages, or (3) another base which results in an equitable distribution. An indirect cost rate should be developed for each separate indirect cost pool developed. The rate in each case should be stated as the percentage relationship between the particular indirect cost pool and the distribution base identified with that pool.

4. Special Indirect Cost Rates

a. In some instances, a single indirect cost rate for all activities of a non-Federal entity or for each major function of the agency may not be appropriate. It may not take into account those different factors which may substantially affect the indirect costs applicable to a particular program or group of programs. The factors may include the physical location of the work, the level of administrative support required, the nature of the facilities or other resources employed, the organizational arrangements used, or any combination thereof. When a particular Federal award is carried out in an environment which appears to generate a significantly different level of indirect costs, provisions should be made for a separate indirect cost pool applicable to that Federal award. The separate indirect cost pool should be developed during

the course of the regular allocation process, and the separate indirect cost rate resulting therefrom should be used, provided that: (1) The rate differs significantly from the rate which would have been developed under paragraphs (C)(2) and (C)(3) of this Appendix, and (2) the Federal award to which the rate would apply is material in amount.

b. Where Federal statutes restrict the reimbursement of certain indirect costs, it may be necessary to develop a special rate for the affected Federal award. Where a "restricted rate" is required, the same procedure for developing a non-restricted rate will be used except for the additional step of the elimination from the indirect cost pool those costs for which the law prohibits reimbursement.

D. Submission and Documentation of Proposals

1. Submission of Indirect Cost Rate Proposals

a. All departments or agencies of the governmental unit desiring to claim indirect costs under Federal awards must prepare an indirect cost rate proposal and related documentation to support those costs. The proposal and related documentation must be retained for audit in accordance with the records retention requirements contained in §75.361.

b. A governmental department or agency unit that receives more than \$35 million in direct Federal funding must submit its indirect cost rate proposal to its cognizant agency for indirect costs. Other governmental department or agency must develop an indirect cost proposal in accordance with the requirements of this Part and maintain the proposal and related supporting documentation for audit. These governmental departments or agencies are not required to submit their proposals unless they are specifically requested to do so by the cognizant agency for indirect costs. Where a non-Federal entity only receives funds as a subrecipient, the pass-through entity will be responsible for negotiating and/or monitoring the subrecipient's indirect costs.

c. Each Indian tribal government desiring reimbursement of indirect costs must submit its indirect cost proposal to the Department of the Interior (its cognizant agency for indirect costs).

d. Indirect cost proposals must be developed (and, when required, submitted) within six months after the close of the governmental unit's fiscal year, unless an exception is approved by the cognizant agency for indirect costs. If the proposed central service cost allocation plan for the same period has not been approved by that time, the indirect cost proposal may be prepared including an amount for central services that is based on the latest federally-approved central service cost allocation plan. The difference between these central service amounts and the amounts ultimately approved will be compensated for by an adjustment in a subsequent period.

2. Documentation of Proposals

The following must be included with each indirect cost proposal:

a. The rates proposed, including subsidiary work sheets and other relevant data, cross referenced and reconciled to the financial data noted in subsection b. Allocated central service costs will be supported by the summary table included in the approved central service cost allocation plan. This summary table is not required to be submitted with the indirect cost proposal if the central service cost allocation plan for the same fiscal year has been approved by the cognizant agency for indirect costs and is available to the funding agency.

b. A copy of the financial data (financial statements, comprehensive annual financial report, executive budgets, accounting reports, etc.) upon which the rate is based. Adjustments resulting from the use of unaudited data will be recognized, where appropriate, by the Federal cognizant agency for indirect costs in a subsequent proposal.

c. The approximate amount of direct base costs incurred under Federal awards. These costs should be broken out between salaries and wages and other direct costs.

d. A chart showing the organizational structure of the agency during the period for which the proposal applies, along with a functional statement(s) noting the duties and/or responsibilities of all units that comprise the agency. (Once this is submitted, only revisions need be submitted with subsequent proposals.)

3. Required Certification.

Each indirect cost rate proposal must be accompanied by a certification in the following form:

Certificate of Indirect Costs

This is to certify that I have reviewed the indirect cost rate proposal submitted herewith and to the best of my knowledge and belief:

(1) All costs included in this proposal [identify date] to establish billing or final indirect costs rates for [identify period covered by rate] are allowable in accordance with the requirements of the Federal award(s) to which they apply and the provisions of this 45 CFR part 75. Unallowable costs have been adjusted for in allocating costs as indicated in the indirect cost proposal.

(2) All costs included in this proposal are properly allocable to Federal awards on the basis of a beneficial or causal relationship between the expenses incurred and the agreements to which they are allocated in accordance with applicable requirements. Further, the same costs that have been treated as indirect costs have not been claimed as direct costs. Similar types of costs have been accounted for consistently and the Federal Government will be notified of any accounting changes that would affect the predetermined rate.

I declare that the foregoing is true and correct.

Governmental Unit:

Signature:

Name of Official:

Title:

Date of Execution:

E. Negotiation and Approval of Rates

1. Indirect cost rates will be reviewed, negotiated, and approved by the cognizant agency on a timely basis. Once a rate has been agreed upon, it will be accepted and used by all Federal agencies unless prohibited or limited by statute. Where a Federal awarding agency has reason to believe that special operating factors affecting its Federal awards necessitate special indirect cost rates, the funding agency will, prior to the time the rates are negotiated, notify the cognizant agency for indirect costs.

2. The use of predetermined rates, if allowed, is encouraged where the cognizant agency for indirect costs has reasonable assurance based on past experience and reliable projection of the non-Federal

entity's costs, that the rate is not likely to exceed a rate based on actual costs. Long-term agreements utilizing predetermined rates extending over two or more years are encouraged, where appropriate.

3. The results of each negotiation must be formalized in a written agreement between the cognizant agency for indirect costs and the governmental unit. This agreement will be subject to re-opening if the agreement is subsequently found to violate a statute, or the information upon which the plan was negotiated is later found to be materially incomplete or inaccurate. The agreed upon rates must be made available to all Federal agencies for their use.

4. Refunds must be made if proposals are later found to have included costs that (a) are unallowable (i) as specified by law or regulation, (ii) as identified in §75.420 of this part, or (iii) by the terms and conditions of Federal awards, or (b) are unallowable because they are clearly not allocable to Federal awards. These adjustments or refunds will be made regardless of the type of rate negotiated (predetermined, final, fixed, or provisional).

F. Other Policies

1. Fringe Benefit Rates

If overall fringe benefit rates are not approved for the governmental unit as part of the central service cost allocation plan, these rates will be reviewed, negotiated and approved for individual recipient agencies during the indirect cost negotiation process. In these cases, a proposed fringe benefit rate computation should accompany the indirect cost proposal. If fringe benefit rates are not used at the recipient agency level (*i.e.*, the agency specifically identifies fringe benefit costs to individual employees), the governmental unit should so advise the cognizant agency for indirect costs.

2. Billed Services Provided by the Recipient Agency

In some cases, governmental departments or agencies (components of the governmental unit) provide and bill for services similar to those covered by central service cost allocation plans (*e.g.*, computer centers). Where this occurs, the governmental departments or agencies (components of the governmental unit) should be guided by the requirements in Appendix V relating to the development of billing rates and documentation requirements, and should advise the cognizant agency for indirect costs of any billed services. Reviews of these types of services (including reviews of costing/billing methodology, profits or losses, etc.) will be made on a case-by-case basis as warranted by the circumstances involved.

3. Indirect Cost Allocations Not Using Rates

In certain situations, governmental departments or agencies (components of the governmental unit), because of the nature of their Federal awards, may be required to develop a cost allocation plan that distributes indirect (and, in some cases, direct) costs to the specific funding sources. In these cases, a narrative cost allocation methodology should be developed, documented, maintained for audit, or submitted, as appropriate, to the cognizant agency for indirect costs for review, negotiation, and approval.

4. Appeals

If a dispute arises in a negotiation of an indirect cost rate (or other rate) between the cognizant agency for indirect costs and the governmental unit, the dispute must be resolved in accordance with the appeals procedures of the cognizant agency for indirect costs.

5. Collection of Unallowable Costs and Erroneous Payments

Costs specifically identified as unallowable and charged to Federal awards either directly or indirectly will be refunded (including interest chargeable in accordance with applicable Federal cognizant agency for indirect costs regulations).

6. OMB Assistance

To the extent that problems are encountered among the Federal agencies or governmental units in connection with the negotiation and approval process, OMB will lend assistance, as required, to resolve such problems in a timely manner.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3019, Jan. 20, 2016]

Appendix VIII to Part 75—Nonprofit Organizations Exempted from Subpart E of Part 75

1. Advance Technology Institute (ATI), Charleston, South Carolina
2. Aerospace Corporation, El Segundo, California
3. American Institutes of Research (AIR), Washington, DC
4. Argonne National Laboratory, Chicago, Illinois
5. Atomic Casualty Commission, Washington, DC
6. Battelle Memorial Institute, Headquartered in Columbus, Ohio
7. Brookhaven National Laboratory, Upton, New York
8. Charles Stark Draper Laboratory, Incorporated, Cambridge, Massachusetts
9. CNA Corporation (CNAC), Alexandria, Virginia
10. Environmental Institute of Michigan, Ann Arbor, Michigan
11. Georgia Institute of Technology/Georgia Tech Applied Research Corporation/Georgia Tech Research Institute, Atlanta, Georgia
12. Hanford Environmental Health Foundation, Richland, Washington
13. IIT Research Institute, Chicago, Illinois
14. Institute of Gas Technology, Chicago, Illinois
15. Institute for Defense Analysis, Alexandria, Virginia
16. LMI, McLean, Virginia
17. Mitre Corporation, Bedford, Massachusetts
18. Noblis, Inc., Falls Church, Virginia
19. National Radiological Astronomy Observatory, Green Bank, West Virginia
20. National Renewable Energy Laboratory, Golden, Colorado
21. Oak Ridge Associated Universities, Oak Ridge, Tennessee
22. Rand Corporation, Santa Monica, California

23. Research Triangle Institute, Research Triangle Park, North Carolina
24. Riverside Research Institute, New York, New York
25. South Carolina Research Authority (SCRA), Charleston, South Carolina
26. Southern Research Institute, Birmingham, Alabama
27. Southwest Research Institute, San Antonio, Texas
28. SRI International, Menlo Park, California
29. Syracuse Research Corporation, Syracuse, New York
30. Universities Research Association, Incorporated (National Acceleration Lab), Argonne, Illinois
31. Urban Institute, Washington DC
32. Non-profit insurance companies, such as Blue Cross and Blue Shield Organizations
33. Other non-profit organizations as negotiated with Federal awarding agencies

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Appendix IX to Part 75—Principles for Determining Costs Applicable to Research and Development Under Grants and Contracts with Hospitals

A. Purpose and Scope

1. Objectives

This appendix provides principles for determining the costs applicable to research and development work performed by hospitals under grants and contracts with the Department of Health and Human Services. These principles are confined to the subject of cost determination and make no attempt to identify the circumstances or dictate the extent of hospital participation in the financing of a particular research or development project. The principles are designed to provide recognition of the full allocated costs of such research work under generally accepted accounting principles. These principles will be applicable to both proprietary and non-profit hospitals. No provision for profit or other increment above cost is provided for in these principles. However, this is not to be interpreted as precluding a negotiated fee between contracting parties when a fee is appropriate.

2. Policy Guides

The successful application of these principles requires development of mutual understanding between representatives of hospitals and of the Department of Health and Human Services as to their scope, applicability and interpretation. It is recognized that:

a. The arrangements for hospital participation in the financing of a research and development project are properly subject to negotiation between the agency and the hospital concerned in accordance with such Government-wide criteria as may be applicable.

b. Each hospital, possessing its own unique combination of staff, facilities and experience, should be encouraged to conduct research in a manner consonant with its own institutional philosophies and objectives.

c. Each hospital in the fulfillment of its contractual obligations should be expected to employ sound management practices.

d. The application of the principles established herein shall be in conformance with the generally accepted accounting practices of hospitals.

e. Hospitals receive reimbursements from the Federal Government for differing types of services under various programs such as support of Research and Development (including discrete clinical centers) Health Services Projects, Medicare, etc. It is essential that consistent procedures for determining reimbursable costs for similar services be employed without regard to program differences. Therefore, both the direct and indirect costs of research programs must be identified as a cost center(s) for the cost finding and step-down requirements of the Medicare program, or in its absence the Medicaid program.

3. Application

All operating agencies within the Department of Health and Human Services that sponsor research and development work in hospitals will apply these principles and related policy guides in determining the costs incurred for such work under grants and cost-reimbursement type contracts and subcontracts. These principles will also be used as a guide in the pricing of fixed-price contracts and subcontracts.

B. Definition of Terms

1. *Organized research* means all research activities of a hospital that may be identified whether the support for such research is from a federal, non-federal or internal source.

2. *Departmental research* means research activities that are not separately budgeted and accounted for. Such work, which includes all research activities not encompassed under the term organized research, is regarded for purposes of this document as a part of the patient care activities of the hospital.

3. *Research agreement* means any valid arrangement to perform federally-sponsored research or development including grants, cost-reimbursement type contracts, cost-reimbursement type subcontracts, and fixed-price contracts and subcontracts.

4. *Instruction and training* means the formal or informal programs of educating and training technical and professional health services personnel, primarily medical and nursing training. This activity, if separately budgeted or identifiable with specific costs, should be considered as a cost objective for purposes of indirect cost allocations and the development of patient care costs.

5. *Other hospital activities* means all organized activities of a hospital not immediately related to the patient care, research, and instructional and training functions which produce identifiable revenue from the performance of these activities. If a non-related activity does not produce identifiable revenue, it may be necessary to allocate this expense using an appropriate basis. In such a case, the activity may be included as an allocable cost (See paragraph C.4 below.) Also included under this definition is any category of cost treated as "Unallowable," provided such category of cost identifies a function or activity to which a portion of the institution's indirect cost (as defined in paragraph E.1.) are properly allocable.

6. *Patient care* means those departments or cost centers which render routine or ancillary services to in-patients and/or out-patients. As used in paragraph I.2.w, it means the cost of these services applicable to patients involved in research programs.

7. *Allocation* means the process by which the indirect costs are assigned as between:

a. Organized research,

b. Patient care including departmental research.

c. Instruction and training, and

d. Other hospital activities.

8. *Cost center* means an identifiable department or area (including research) within the hospital which has been assigned an account number in the hospital accounting system for the purpose of accumulating expense by department or area.

9. *Cost finding* is the process of recasting the data derived from the accounts ordinarily kept by a hospital to ascertain costs of the various types of services rendered. It is the determination of direct costs by specific identification and the proration of indirect costs by allocation.

10. *Step down* is a cost finding method that recognizes that services rendered by certain nonrevenue-producing departments or centers are utilized by certain other nonrevenue producing centers as well as by the revenue-producing centers. All costs of nonrevenue-producing centers are allocated to all centers which they serve, regardless of whether or not these centers produce revenue. Following the apportionment of the cost of the nonrevenue-producing center, that center will be considered closed and no further costs are apportioned to that center.

11. *Scatter bed* is a bed assigned to a research patient based on availability. Research patients occupying these beds are not physically segregated from nonresearch patients occupying beds. Scatter beds are geographically dispersed among all the beds available for use in the hospital. There are no special features attendant to a scatter bed that distinguishes it from others that could just as well have been occupied.

12. *Discrete bed* is a bed or beds that have been set aside for occupancy by research patients and are physically segregated from other hospital beds in an environment that permits an easily ascertainable allocation of costs associated with the space they occupy and the services they generate.

C. Basic Considerations

1. Composition of Total Costs

The cost of a research agreement is comprised of the allowable direct costs incident to its performance plus the allocable portion of the allowable indirect costs of the hospital less applicable credits. (See paragraph C.5.)

2. Factors Affecting Allowability of Costs

The tests of allowability of costs under these principles are:

a. They must be reasonable.

b. They must be assigned to research agreements under the standards and methods provided herein.

c. They must be accorded consistent treatment through application of those generally accepted accounting principles appropriate to the circumstances (See paragraph A.2.e.) and

d. They must conform to any limitations or exclusions set forth in these principles or in the research agreement as to types or amounts of cost items.

3. Reasonable Costs

A cost may be considered reasonable if the nature of the goods or services acquired or applied, and the amount involved therefor reflect the action that a prudent person would have taken under the circumstances prevailing at the time the decision to incur the cost was made. Major considerations involved in the determination of the reasonableness of a cost are:

a. Whether or not the cost is of a type generally recognized as necessary for the operation of the hospital or the performance of the research agreement,

b. The restraints or requirements imposed by such factors as arm's length bargaining, federal and state laws and regulations, and research agreement terms and conditions,

c. Whether or not the individuals concerned acted with due prudence in the circumstances, considering their responsibilities to the hospital, its patients, its employees, its students, the Government, and the public at large, and

d. The extent to which the actions taken with respect to the incurrence of the cost are consistent with established hospital policies and practices applicable to the work of the hospital generally, including Government research.

4. Allocable Costs

a. A cost is allocable to a particular cost center (*i.e.*, a specific function, project, research agreement, department, or the like) if the goods or services involved are chargeable or assignable to such cost center in accordance with relative benefits received or other equitable relationship. Subject to the foregoing, a cost is allocable to a research agreement if it is incurred solely to advance the work under the research agreement; or it benefits both the research agreement and other work of the hospital in proportions that can be approximated through use of reasonable methods; or it is necessary to the overall operation of the hospital and, in light of the standards provided in this chapter, is deemed to be assignable in part to organized research. Where the purchase of equipment or other capital items are specifically authorized under a research agreement, the amounts thus authorized for such purchases are allocable to the research agreement regardless of the use that may subsequently be made of the equipment or other capital items involved.

b. Any costs allocable to a particular research agreement under the standards provided in these principles may not be shifted to other research agreements in order to meet deficiencies caused by overruns or other fund considerations, to avoid restrictions imposed by law or by terms of the research agreement, or for other reasons of convenience.

5. Applicable Credits

a. The term applicable credits refers to those receipts or negative expenditure types of transactions which operate to offset or reduce expense items that are allocable to research agreements as direct or indirect costs as outlined in paragraph E.1. Typical examples of such transactions are: Purchase discounts, rebates, or allowances; recoveries or indemnities on losses; sales of scrap or incidental services; tuition; adjustments of overpayments or erroneous charges; and services rendered to patients admitted to federally funded clinical research centers, primarily for care though also participating in research protocols.

b. In some instances, the amounts received from the Federal Government to finance hospital activities or service operations should be treated as applicable credits. Specifically, the concept of netting such credit items against related expenditures should be applied by the hospital in determining the rates

or amounts to be charged to government research for services rendered whenever the facilities or other resources used in providing such services have been financed directly, in whole or in part, by federal funds. Thus, where such items are provided for or benefit a particular hospital activity, *i.e.*, patient care, research, instruction and training, or other, they should be treated as an offset to the indirect costs apportioned to that activity. Where the benefits are common to all hospital activities they should be treated as a credit to the total indirect cost pool before allocation to the various cost objectives.

D. Direct Costs

1. General

Direct costs are those that can be identified specifically with a particular cost center. For this purpose, the term cost center refers not only to the ultimate centers against which costs are finally lodged such as research agreements, but also to other established cost centers such as the individual accounts for recording particular objects or items of expense, and the separate account groupings designed to record the expenses incurred by individual organizational units, functions, projects and the like. In general, the administrative functions and service activities described in paragraph VI are identifiable as separate cost centers, and the expenses associated with such centers become eligible in due course for distribution as indirect costs of research agreements and other ultimate cost centers.

2. Application to Research Agreements

Identifiable benefit to the research work rather than the nature of the goods and services involved is the determining factor in distinguishing direct from indirect costs of research agreements. Typical of transactions chargeable to a research agreement as direct costs are the compensation of employees for the time or effort devoted to the performance of work under the research agreement, including related staff benefit and pension plan costs to the extent that such items are consistently accorded to all employees and treated by the hospital as direct rather than indirect costs (see paragraph E.2.d(2)); the costs of materials consumed or expended in the performance of such work; and other items of expense incurred for the research agreement, such as extraordinary utility consumption. The cost of materials supplied from stock or services rendered by specialized facilities or other institutional service operations may be included as direct costs of research agreements provided such items are consistently treated by the institution as direct rather than indirect costs and are charged under a recognized method of costing or pricing designed to recover only the actual direct and indirect costs of such material or service and conforming to generally accepted cost accounting practices consistently followed by the institution.

E. Indirect Costs

1. General

Indirect costs are those that have been incurred for common or joint objectives, and thus are not readily subject to treatment as direct costs of research agreements or other ultimate or revenue producing cost centers. In hospitals such costs normally are classified but not necessarily restricted to the following functional categories: Depreciation; Administrative and General (including fringe benefits if not charged directly); Operation of Plant; Maintenance of Plant; Laundry and Linen Service; Housekeeping; Dietary; Maintenance of Personnel; and Medical Records and Library.

2. Criteria for Distribution

a. *Base period.*

A base period for distribution of indirect costs is the period during which such costs are incurred and accumulated for distribution to work performed within that period. The base period normally should

coincide with the fiscal year established by the hospital, but in any event the base period should be so selected as to avoid inequities in the distribution of costs.

b. Need for cost groupings.

The overall objective of the allocation process is to distribute the indirect costs described in paragraph F. to organized research, patient care, instruction and training, and other hospital activities in reasonable proportions consistent with the nature and extent of the use of the hospital's resources by research personnel, medical staff, patients, students, and other personnel or organizations. In order to achieve this objective with reasonable precision, it may be necessary to provide for selective distribution by establishing separate groupings of cost within one or more of the functional categories of indirect costs referred to in paragraph E.1. In general, the cost groupings established within a functional category should constitute, in each case, a pool of those items of expense that are considered to be of like character in terms of their relative contribution to (or degree of remoteness from) the particular cost centers to which distribution is appropriate. Each such pool or cost grouping should then be distributed individually to the related cost centers, using the distribution base or method most appropriate in the light of the guides set out in 2.c. below. While this paragraph places primary emphasis on a step-down method of indirect cost computation, paragraph H. provides an alternate method which may be used under certain conditions.

c. Selection of distribution method.

Actual conditions must be taken into account in selecting the method or base to be used in distributing to related cost centers the expenses assembled under each of the individual cost groups established as indicated under 2.b. above. Where a distribution can be made by assignment of a cost grouping directly to the area benefited, the distribution should be made in that manner. Care should be given, however, to eliminate similar or duplicative costs from any other distribution made to this area. Where the expenses under a cost grouping are more general in nature, the distribution to related cost centers should be made through use of a selected base which will produce results which are equitable to both the Government and the hospital. In general, any cost element or cost-related factor associated with the hospital's work is potentially adaptable for use as a distribution base provided:

(1) It can readily be expressed in terms of dollars or other quantitative measure (total direct expenditures, direct salaries, man-hours applied, square feet utilized, hours of usage, number of documents processed, population served, and the like); and

(2) It is common to the related cost centers during the base period. The essential consideration in selection of the distribution base in each instance is that it be the one best suited for assigning the pool of costs to related cost centers in accord with the relative benefits derived; the traceable cause and effect relationship; or logic and reason, where neither benefit nor cause and effect relationship is determinable.

d. General consideration on cost groupings.

The extent to which separate cost groupings and selective distribution would be appropriate at a hospital is a matter of judgment to be determined on a case-by-case basis. Typical situations which may warrant the establishment of two or more separate cost groups (based on account classification or analysis) within a functional category include but are not limited to the following:

(1) Where certain items or categories of expense relate solely to one of the major divisions of the hospital (patient care, sponsored research, instruction and training, or other hospital activities) or to any two but not all, such expenses should be set aside as a separate cost grouping for direct assignment or selective distribution in accordance with the guides provided in 2.b. and 2.c.above.

(2) Where any types of expense ordinary treated as indirect cost as outlined in paragraph are charged to research agreements as direct costs, the similar type expenses applicable to other activities of the institution must through separate cost grouping be excluded from the indirect costs allocable to research agreements.

(3) Where it is determined that certain expenses are for the support of a service unit or facility whose output is susceptible of measurement on a workload or other quantitative basis, such expenses should be set aside as a separate cost grouping for distribution on such basis to organized research and other hospital activities.

(4) Where organized activities (including identifiable segments of organized research as well as the activities cited in B.5.) provide their own purchasing, personnel administration, building maintenance, or housekeeping or similar service, the distribution of such elements of indirect cost to such activities should be accomplished through cost grouping which includes only that portion of central indirect costs (such as for overall management) which are properly allocable to such activities.

(5) Where the hospital elects to treat as indirect charges the costs of pension plans and other staff benefits, such costs should be set aside as a separate cost grouping for selective distribution to related cost centers, including organized research.

(6) Where the hospital is affiliated with a medical school or some other institution which performs organized research on the hospital's premises, every effort should be made to establish separate cost groupings in the Administrative and General or other applicable category which will reasonably reflect the use of services and facilities by such research. (See also paragraph.)

e. Materiality.

Where it is determined that the use of separate cost groupings and selective distribution are necessary to produce equitable results, the number of such separate cost groupings within a functional category should be held within practical limits, after taking into consideration the materiality of the amounts involved and the degree of precision attainable through less selective methods of distribution.

3. Administration of Limitations on Allowances for Indirect Costs

a. Research grants may be subject to laws and/or administrative regulations that limit the allowance for indirect costs under each such grant to a stated percentage of the direct costs allowed. Agencies that sponsor such grants will establish procedures which will assure that:

(1) The terms and amount authorized in each case conform with the provisions of paragraphs C, E, and I of these principles as they apply to matters involving the consistent treatment and allowability of individual items of cost; and

(2) The amount actually allowed for indirect costs under each such research grant does not exceed the maximum allowable under the limitation or the amount otherwise allowable under these principles, whichever is the smaller.

b. Where the actual allowance for indirect costs on any research grant must be restricted to the smaller of the two alternative amounts referred to in 3.a. above, such alternative amounts should be determined in accordance with the following guides:

(1) The maximum allowable under the limitation should be established by applying the stated percentage to a direct cost base which shall include all items of expenditure authorized by the sponsoring agency for inclusion as part of the total cost for the direct benefit of the work under the grant; and

(2) The amount otherwise allowable under these principles should be established by applying the current institutional indirect cost rate to those elements of direct cost which were included in the base on which the rate was computed.

c. When the maximum amount allowable under a statutory limitation or the terms of a research agreement is less than the amount otherwise allocable as indirect costs under these principles, the amount not recoverable as indirect costs under the research agreement involved may not be shifted to other research agreements.

F. Identification and Assignment of Indirect Costs

1. Depreciation or Use Charge

a. The expenses under this heading should include depreciation (as defined in paragraph I.2.i(1)) on buildings, fixed equipment, and movable equipment, except to the extent purchased through federal funds. Where adequate records for the recording of depreciation are not available, a use charge may be substituted for depreciation (See paragraph I.2.)

b. The expenses included in this category should be allocated to applicable cost centers in a manner consistent with the guides set forth in paragraph E.2., on a basis that gives primary emphasis to (a) space utilization with respect to depreciation on buildings and fixed equipment; and (b) specific identification of assets and their use with respect to movable equipment as it relates to patient care, organized research, instruction and training, and other hospital activities. Where such records are not sufficient for the purpose of the foregoing, reasonable estimates will suffice as a means for effecting distribution of the amounts involved.

2. Administration and General Expenses

a. The expenses under this heading are those that have been incurred for the administrative offices of the hospital including accounting, personnel, purchasing, information centers, telephone expense, and the like which do not relate solely to any major division of the institution, *i.e.*, solely to patient care, organized research, instruction and training, or other hospital activities.

b. The expenses included in this category may be allocated on the basis of total expenditures exclusive of capital expenditures, or salaries and wages in situations where the results of the distribution made on this basis are deemed to be equitable both to the Government and the hospital; otherwise the distribution of Administration and General expenses should be made through use of selected bases, applied to separate cost groupings established within this category of expenses in accordance with the guides set out in paragraph E.2.

3. Operation of Plant

a. The expenses under this heading are those that have been incurred by a central service organization or at the departmental level for the administration, supervision, and provision of utilities (exclusive of telephone expense) and protective services to the physical plant. They include expenses incurred for such items as power plant operations, general utility costs, elevator operations, protection services, and general parking lots.

b. The expenses included in this category should be allocated to applicable cost centers in a manner consistent with the guides provided in paragraph E.2., on a basis that gives primary emphasis to space utilization. The allocations should be developed as follows:

(1) Where actual space and related cost records are available or can readily be developed and maintained without significant change in the accounting practices, the amount distributed should be based on such records;

(2) Where the space and related cost records maintained are not sufficient for purposes of the foregoing, a reasonable estimate of the proportion of total space assigned to the various costs centers normally will suffice as a means for effecting distribution of the amounts involved; or

(3) Where it can be demonstrated that an area or volume or space basis of allocation is impractical or inequitable, other bases may be used provided consideration is given to the use of facilities by research personnel and others, including patients.

4. Maintenance of Plant

a. The expenses under this heading should include:

(1) All salaries and wages pertaining to ordinary repair and maintenance work performed by employees on the payroll of the hospital;

(2) All supplies and parts used in the ordinary repairing and maintaining of buildings and general equipment; and

(3) Amounts paid to outside concerns for the ordinary repairing and maintaining of buildings and general equipment.

b. The expenses included in this category should be allocated to applicable cost centers in a manner consistent with the guides provided in paragraph E.2. on a basis that gives primary emphasis to space utilization. The allocations and apportionments should be developed as follows:

(1) Where actual space and related cost records are available and can readily be developed and maintained without significant change in the accounting practices, the amount distributed should be based on such records;

(2) Where the space and related cost records maintained are not sufficient for purposes of the foregoing, a reasonable estimate of the proportion of total space assigned to the various cost centers normally will suffice as a means for effecting distribution of the amounts involved; or

(3) Where it can be demonstrated that an area or volume of space basis of allocation is impractical or inequitable, other basis may be used provided consideration is given to the use of facilities by research personnel and others, including patients.

5. Laundry and Linen

a. The expenses under this heading should include:

(1) Salaries and wages of laundry department employees, seamstresses, clean linen handlers, linen delivery men, etc.;

(2) Supplies used in connection with the laundry operation and all linens purchased; and

(3) Amounts paid to outside concerns for purchased laundry and/or linen service.

b. The expense included in this category should be allocated to related cost centers in a manner consistent with the guides provided in paragraph E.2. on a basis that gives primary emphasis to actual pounds of linen used. The allocations should be developed as follows:

(1) Where actual poundage and related cost records are available or can readily be developed and maintained without significant change in the accounting practices, the amount distributed should be based on such records;

(2) Where it can be demonstrated that a poundage basis of allocation is impractical or inequitable other bases may be used provided consideration is given to the use of linen by research personnel and others, including patients.

6. Housekeeping

a. The expenses under this heading should include:

(1) All salaries and wages of the department head, foreman, maids, porters, janitors, wall washers, and other housekeeping employees;

(2) All supplies used in carrying out the housekeeping functions; and

(3) Amounts paid to outside concerns for purchased services such as window washing, insect extermination, etc.

b. The expenses included in this category should be allocated to related cost centers in a manner consistent with the guides provided in paragraph E.2. on a basis that gives primary emphasis to space actually serviced by the housekeeping department. The allocations and apportionments should be developed as follows:

(1) Where actual space serviced and related cost records are available or can readily be developed and maintained without significant change in the accounting practices, the amount distributed should be based on such records;

(2) Where the space serviced and related cost records maintained are not sufficient for purposes of the foregoing, a reasonable estimate of the proportion of total space assigned to the various cost centers normally will suffice as a means for effecting distribution of the amounts of housekeeping expenses involved; or

(3) Where it can be demonstrated that the space serviced basis of allocation is impractical or inequitable, other bases may be used provided consideration is given to the use of housekeeping services by research personnel and others, including patients.

7. Dietary

a. These expenses, as used herein, shall mean only the subsidy provided by the hospital to its employees including research personnel through its cafeteria operation. The hospital must be able to demonstrate through the use of proper cost accounting techniques that the cafeteria operates at a loss to the benefit of employees.

b. The reasonable operating loss of a subsidized cafeteria operation should be allocated to related cost centers in a manner consistent with the guides provided in paragraph E.2. on a basis that gives primary emphasis to number of employees.

8. Maintenance (Housing) of Personnel

a. The expenses under this heading should include:

(1) The salaries and wages of matrons, clerks, and other employees engaged in work in nurses' residences and other employees' quarters;

(2) All supplies used in connection with the operation of such dormitories; and

(3) Payments to outside agencies for the rental of houses, apartments, or rooms used by hospital personnel.

b. The expenses included in this category should be allocated to related cost centers in a manner consistent with the guides provided in paragraph E.2. on a basis that gives primary emphasis to employee utilization of housing facilities. The allocation should be developed as follows:

(1) Appropriate credit should be given for all payments received from employees or otherwise to reduce the expense to be allocated;

(2) A net cost per housed employee may then be computed; and

(3) Allocation should be made on a departmental basis based on the number of housed employees in each respective department.

9. Medical Records and Library

a. The expenses under this heading should include:

(1) The salaries and wages of the records librarian, medical librarian, clerks, stenographers, etc.; and

(2) All supplies such as medical record forms, chart covers, filing supplies, stationery, medical library books, periodicals, etc.

b. The expenses included in this category should be allocated to related cost centers in a manner consistent with the guides provided in paragraph E.2. on a basis that gives primary emphasis to a special time survey of medical records personnel. If this appears to be impractical or inequitable, other bases may be used provided consideration is given to the use of these facilities by research personnel and others, including patients.

G. Determination and Application of Indirect Cost Rate or Rates

1. Indirect Cost Pools

a. Subject to b. below, indirect costs allocated to organized research should be treated as a common pool, and the costs in such common pool should be distributed to individual research agreements benefiting therefrom on a single rate basis.

b. In some instances a single rate basis for use on all government research at a hospital may not be appropriate since it would not take into account those different environmental factors which may affect substantially the indirect costs applicable to a particular segment of government research at the institution. For this purpose, a particular segment of government research may be that performed under a single research agreement or it may consist of research under a group of research agreements

performed in a common environment. The environmental factors are not limited to the physical location of the work. Other important factors are the level of the administrative support required, the nature of the facilities or other resources employed, the scientific disciplines or technical skills involved, the organizational arrangements used, or any combination thereof. Where a particular segment of government research is performed within an environment which appears to generate a significantly different level of indirect costs, provision should be made for a separate indirect cost pool applicable to such work. An example of this differential may be in the development of a separate indirect cost pool for a clinical research center grant. The separate indirect cost pool should be developed during the course of the regular distribution process, and the separate indirect cost rate resulting therefrom should be utilized provided it is determined that:

(1) Such indirect cost rate differs significantly from that which would have obtained under a. above; and

(2) The volume of research work to which such rate would apply is material in relation to other government research at the institution.

c. It is a common practice for grants or contracts awarded to other institutions, typically University Schools of Medicine, to be performed on hospital premises. In these cases the hospital should develop a separate indirect cost pool applicable to the work under such grants or contracts. This pool should be developed by a selective distribution of only those indirect cost categories which benefit the work performed by the other institution, within the practical limits dictated by available data and the materiality of the amounts involved. Hospital costs determined to be allocable to grants or contracts awarded to another institution may not be recovered as a cost of grants or contracts awarded directly to the hospital.

2. The Distribution Base

Preferably, indirect costs allocated to organized research should be distributed to applicable research agreements on the basis of direct salaries and wages. However, where the use of salaries and wages results in an inequitable allocation of costs to the research agreements, total direct costs or a variation thereof, may be used in lieu of salaries and wages. Regardless of the base used, an indirect cost rate should be determined for each of the separate indirect cost pools developed pursuant to paragraph G.1. The rate in each case should be stated as the percentage which the amount of the particular indirect cost pool is of the total direct salaries and wages (or other base selected) for all research agreements identified with such a pool.

3. Negotiated Lump Sum for Overhead

A negotiated fixed amount in lieu of indirect costs may be appropriate for self-contained or off-campus research activities where the benefits derived from a hospital's indirect services cannot be readily determined. Such amount negotiated in lieu of indirect costs will be treated as an offset to the appropriate indirect cost pool after allocation to patient care, organized research, instruction and training, and other hospital activities. The base on which such remaining expenses are allocated should be appropriately adjusted.

4. Predetermined Overhead Rates

The utilization of predetermined fixed overhead rates may offer potential advantages in the administration of research agreements by facilitating the preparation of research budgets and permitting more expeditious close out of the agreements when the work is completed. Therefore, to the extent allowed by law, consideration may be given to the negotiation of predetermined fixed rates in those situations where the cost experience and other pertinent factors available are deemed sufficient to enable the Government and the hospital to reach a reasonable conclusion as to the probable level of the indirect cost rate for the ensuing accounting period.

H. Simplified Method for Small Institutions

1. General

a. Where the total direct cost of all government-sponsored research and development work at a hospital in a year is minimal, the use of the abbreviated procedure described in paragraph H.2. below may be acceptable in the determination of allowable indirect costs. This method may also be used to initially determine a provisional indirect cost rate for hospitals that have not previously established a rate. Under this abbreviated procedure, data taken directly from the institution's most recent annual financial report and immediately available supporting information will be utilized as a basis for determining the indirect cost rate applicable to research agreements at the institution.

b. The rigid formula approach provided under the abbreviated procedure has limitations which may preclude its use at some hospitals either because the minimum data required for this purpose are not readily available or because the application of the abbreviated procedure to the available data produces results which appear inequitable to the Government or the hospital. In any such case, indirect costs should be determined through use of the regular procedure rather than the abbreviated procedure.

c. In certain instances where the total direct cost of all government-sponsored research and development work at the hospital is more than minimal, the abbreviated procedure may be used if prior permission is obtained. This alternative will be granted only in those cases where it can be demonstrated that the step-down technique cannot be followed.

2. Abbreviated Procedure

a. Total expenditures as taken from the most recent annual financial report will be adjusted by eliminating from further consideration expenditures for capital items as defined in paragraph I.2.d. and unallowable costs as defined under various headings in paragraph I. and paragraph C.5.

b. Total expenditures as adjusted under the foregoing will then be distributed among (1) expenditures applicable to administrative and general overhead functions, (2) expenditures applicable to all other overhead functions, and (3) expenditures for all other purposes. The first group shall include amounts associated with the functional categories, Administration and General, and Dietary, as defined in paragraphs F.2. and 7. The second group shall include Depreciation, Operation of Plant, Maintenance of Plant, and Housekeeping. The third group—expenditures for all other purposes—shall include the amounts applicable to all other activities, namely, patient care, organized research, instruction and training, and other hospital activities as defined under paragraph B.5. For the purposes of this section, the functional categories of Laundry and Linen, Maintenance of Personnel, and Medical Records and Library as defined in paragraph E. shall be considered as expenditures for all other purposes.

c. The expenditures distributed to the first two groups in paragraph H.2.b. should then be adjusted by those receipts or negative expenditure types of transactions which tend to reduce expense items allocable to research agreements as indirect costs. Examples of such receipts or negative expenditures are itemized in paragraph C.5.a.

d. In applying the procedures in paragraphs H.2.a and 2.b, the cost of unallowable activities such as Gift Shop, Investment Property Management, Fund Raising, and Public Relations, when they benefit from the hospital's indirect cost services, should be treated as expenditures for all other purposes. Such activities are presumed to benefit from the hospital's indirect cost services when they include salaries of personnel working in the hospital. When they do not include such salaries, they should be eliminated from the indirect cost rate computation.

e. The indirect cost rate will then be computed in two stages. The first stage requires the computation of an Administrative and General rate component. This is done by applying a ratio of

research direct costs over total direct costs to the Administrative and General pool developed under paragraphs H.2.b and 2.c. above. The resultant amount—that which is allocable to research—is divided by the direct research cost base. The second stage requires the computation of an All Other Indirect Cost rate component. This is done by applying a ratio of research direct space over total direct space to All Other Indirect Cost pool developed under paragraphs H.2.b. and 2.c. above. The resultant amount—that which is allocable to research—is divided by the direct research cost base.

The total of the two rate components will be the institution's indirect cost rate. For the purposes of this section, the research direct cost or space and total direct cost or space will be that cost or space identified with the functional categories classified under Expenditures for all other purposes under paragraph H.2.b.

I. General Standards for Selected Items of Cost

1. General

This section provides standards to be applied in establishing the allowability of certain items involved in determining cost. These standards should apply irrespective of whether a particular item of cost is properly treated as direct cost or indirect cost. Failure to mention a particular item of cost in the standards is not intended to imply that it is either allowable or unallowable; rather, determination as to allowability in each case should be based on the treatment or standards provided for similar or related items of cost. In case of discrepancy between the provisions of a specific research agreement and the applicable standards provided, the provisions of the research agreement should govern. However, in some cases advance understandings should be reached on particular cost items in order that the full costs of research be supported. The extent of allowability of the selected items of cost covered in this section has been stated to apply broadly to many accounting systems in varying environmental situations. Thus, as to any given research agreement, the reasonableness and allocability of certain items of costs may be difficult to determine, particularly in connection with hospitals which have medical school or other affiliations. In order to avoid possible subsequent disallowance or dispute based on unreasonableness or nonallocability, it is important that prospective recipients of federal funds, particularly those whose work is predominantly or substantially with the Government, seek agreement with the Government in advance of the incurrence of special or unusual costs in categories where reasonableness or allocability are difficult to determine. Such agreement may also be initiated by the Government. Any such agreement should be incorporated in the research agreement itself. However, the absence of such an advance agreement on any element of cost will not in itself serve to make that element either allowable or unallowable. Examples of costs on which advance agreements may be particularly important are:

- a. Facilities costs, such as;
 - (1) Depreciation
 - (2) Rental
 - (3) Use charges for fully depreciated assets
 - (4) Idle facilities and idle capacity
 - (5) Plant reconversion
 - (6) Extraordinary or deferred maintenance and repair
 - (7) Acquisition of automatic data processing equipment.

- b. Pre-award costs
- c. Non-hospital professional activities
- d. Self-insurance
- e. Support services charged directly (computer services, printing and duplicating services, etc.)
- f. Employee compensation, travel, and other personnel costs, including:
 - (1) Compensation for personal service, including wages and salaries, bonuses and incentives, premium payments, pay for time not worked, and supplementary compensation and benefits, such as pension and retirement, group insurance, severance pay plans, and other forms of compensation;
 - (2) Morale, health, welfare, and food service and dormitory costs.
 - (3) Training and education costs.
 - (4) Relocation costs, including special or mass personnel movement.

2. Selected Items

a. *Advertising costs.* The term advertising costs means the costs of advertising media and corollary administrative costs. Advertising media include magazines, newspapers, radio and television programs, direct mail, exhibits, and the like. The only advertising costs allowable are those which are solely for:

- (1) The recruitment of persons required for the performance by the institution of obligations arising under the research agreement, when considered in conjunction with all other recruitment costs as set forth in paragraph 1.2.hh;
- (2) The procurement of scarce items for the performance of the research agreement; or
- (3) The disposal of scrap or surplus materials acquired in the performance of the research agreement.

Costs of this nature, if incurred for more than one research agreement or for both research agreement work and other work of the institution, are allowable to the extent that the principles in paragraphs D. and E. are observed.

b. *Bad debts.* Losses arising from uncollectible accounts and other claims and related collection and legal costs are unallowable except that a bad debt may be included as a direct cost of the research agreement to the extent that it is caused by a research patient and approved by the awarding agency. This inclusion is only intended to cover the situation of the patient admitted for research purposes who subsequently or in conjunction with the research receives clinical care for which a charge is made to the patient. If, after exhausting all means of collecting these charges, a bad debt results, it may be considered an appropriate charge to the research agreement.

c. *Bonding costs.*

(1) Bonding costs arise when the Government requires assurance against financial loss to itself or others by reason of the act or default of the hospital. They arise also in instances where the hospital requires similar assurance.

Included are such types as bid, performance, payment, advance payment, infringement, and fidelity bonds.

(2) Costs of bonding required pursuant to the terms of the research agreement are allowable.

(3) Costs of bonding required by the hospital in the general conduct of its business are allowable to the extent that such bonding is in accordance with sound business practice and the rates and premiums are reasonable under the circumstances.

d. *Capital expenditures.* The costs of equipment, buildings, and repairs which materially increase the value or useful life of buildings or equipment should be capitalized and are unallowable except as provided for in the research agreement.

e. *Civil defense costs.* Civil defense costs are those incurred in planning for, and the protection of life and property against the possible effects of enemy attack. Reasonable costs of civil defense measures (including costs in excess of normal plant protection costs, first-aid training and supplies, fire-fighting training, posting of additional exit notices and directions, and other approved civil defense measures) undertaken on the institution's premises pursuant to suggestions or requirements of civil defense authorities are allowable when distributed to all activities of the institution. Capital expenditures for civil defense purposes will not be allowed, but a use allowance or depreciation may be permitted in accordance with provisions set forth elsewhere. Costs of local civil defense projects not on the institution's premises are unallowable.

f. *Communication costs.* Costs incurred for telephone services, local and long distance telephone calls, telegrams, radiograms, postage, and the like are allowable.

g. *Compensation for personal services.*

(1) General

Compensation for personal services covers all remuneration paid currently or accrued to employees of the hospital for services rendered during the period of performance under government research agreements. Such remuneration includes salaries, wages, staff benefits (see paragraph I.2.j.), and pension plan costs (see paragraph I.2.y.). The costs of such remuneration are allowable to the extent that the total compensation to individual employees is reasonable for the services rendered and conforms to the established policy of the institution consistently applied, and provided that the charges for work performed directly on government research agreements and for other work allocable as indirect costs to sponsored research are determined and supported as hereinafter provided. For non-profit, non-proprietary institutions, where federally supported programs constitute less than a preponderance of the activity at the institution the primary test of reasonableness will be to require that the institution's compensation policies be applied consistently both to federally-sponsored and non-sponsored activities alike. However, where special circumstances so dictate a contractual clause may be utilized which calls for application of the test of comparability in determining the reasonableness of compensation.

(2) Payroll Distribution

Amounts charged to organized research for personal services, regardless of whether treated as direct costs or allocated as indirect costs, will be based on hospital payrolls which have been approved and documented in accordance with generally accepted hospital practices. In order to develop necessary direct and indirect allocations of cost, supplementary data on time or effort as provided in paragraph (3) below, normally need be required only for individuals whose compensation is properly chargeable to two or more research agreements or to two or more of the following broad functional categories: (i) Patient care; (ii) organized research; (iii) instruction and training; (iv) indirect activities as defined in paragraph E.1.; or (v) other hospital activities as defined in paragraph B.5.

(3) Reporting Time or Effort

Charges for salaries and wages of individuals other than members of the professional staff will be supported by daily time and attendance and payroll distribution records. For members of the professional staff, current and reasonable estimates of the percentage distribution of their total effort may be used as support in the absence of actual time records. The term professional staff for purposes of this section includes physicians, research associates, and other personnel performing work at responsible levels of activities. These personnel normally fulfill duties, the competent performance of which usually requires persons possessing degrees from accredited institutions of higher learning and/or state licensure. In order to qualify as current and reasonable, estimates must be made no later than one month (though not necessarily a calendar month) after the month in which the services were performed.

(4) Preparation of Estimates of Effort

Where required under paragraph (3) above, estimates of effort spent by a member of the professional staff on each research agreement should be prepared by the individual who performed the services or by a responsible individual such as a department head or supervisor having first-hand knowledge of the services performed on each research agreement. Estimates must show the allocation of effort between organized research and all other hospital activities in terms of the percentage of total effort devoted to each of the broad functional categories referred to in (2) above. The estimate of effort spent on a research agreement may include a reasonable amount of time spent in activities contributing and intimately related to work under the agreement, such as preparing and delivering special lectures about specific aspects of the ongoing research, writing research reports and articles, participating in appropriate research seminars, consulting with colleagues with respect to related research, and attending appropriate scientific meetings and conferences. The term "all other hospital activities" would include departmental research, administration, committee work, and public services undertaken on behalf of the hospital.

(5) Application of Budget Estimates

Estimates determined before the performance of services, such as budget estimates on a monthly, quarterly, or yearly basis do not qualify as estimates of effort spent.

(6) Non-Hospital Professional Activities

A hospital must not alter or waive hospital-wide policies and practices dealing with the permissible extent of professional services over and above those traditionally performed without extra hospital compensation, unless such arrangements are specifically authorized by the sponsoring agency. Where hospital-wide policies do not adequately define the permissible extent of consultantships or other non-hospital activities undertaken for extra pay, the Government may require that the effort of professional staff working under research agreements be allocated as between (i) hospital activities, and (ii) non-hospital professional activities. If the sponsoring agency should consider the extent of non-hospital professional effort excessive, appropriate arrangements governing compensation will be negotiated on a case by case basis.

(7) Salary Rates for Part-Time Appointments

Charges for work performed on government research by staff members having only part-time appointments will be determined at a rate not in excess of that for which he is regularly paid for his part-time staff assignment.

h. Contingency provisions.

Contributions to a contingency reserve or any similar provisions made for events the occurrence of which cannot be foretold with certainty as to time, intensity, or with an assurance of their happening, are unallowable.

i. *Depreciation and use allowances.*

(1) Hospitals may be compensated for the use of buildings, capital improvements and usable equipment on hand through depreciation or use allowances. Depreciation is a charge to current operations which distributes the cost of a tangible capital asset, less estimated residual value, over the estimated useful life of the asset in a systematic and logical manner. It does not involve a process of valuation. Useful life has reference to the prospective period of economic usefulness in the particular hospital's operations as distinguished from physical life. Use allowances are the means of allowing compensation when depreciation or other equivalent costs are not considered.

(2) Due consideration will be given to government-furnished research facilities utilized by the institution when computing use allowances and/or depreciation if the government-furnished research facilities are material in amount. Computation of the use allowance and/or depreciation will exclude both the cost or any portion of the cost of grounds, buildings and equipment borne by or donated by the Federal Government, irrespective of where title was originally vested or where it presently resides, and secondly, the cost of grounds. Capital expenditures for land improvements (paved areas, fences, streets, sidewalks, utility conduits, and similar improvements not already included in the cost of buildings) are allowable provided the systematic amortization of such capital expenditures has been provided in the institution's books of accounts, based on reasonable determinations of the probable useful lives of the individual items involved, and the share allocated to organized research is developed from the amount thus amortized for the base period involved.

(3) Normal depreciation on a hospital's plant, equipment, and other capital facilities, except as excluded by (4) below, is an allowable element of research cost provided that the amount thereof is computed:

i. Upon the property cost basis used by the hospital for Federal Income Tax purposes (See section 167 of the Internal Revenue Code of 1954); or

ii. In the case of non-profit or tax exempt organizations, upon a property cost basis which could have been used by the hospital for Federal Income Tax purposes, had such hospital been subject to the payment of income tax; and in either case

iii. By the consistent application to the assets concerned of any generally accepted accounting method, and subject to the limitations of the Internal Revenue Code of 1954 as amended, including—

(a) The straight line method;

(b) The declining balance method, using a rate not exceeding twice the rate which would have been used had the annual allowance been computed under the method described in (a) above;

(c) The sum of the years-digits method; and

(d) Any other consistent method productive of an annual allowance which, when added to all allowances for the period commencing with the use of the property and including the current year, does not during the first two-thirds of the useful life of the property exceed the total of such allowances which would have been used had such allowances been computed under the method described in (b) above.

(4) Where the depreciation method is followed, adequate property records must be maintained. The period of useful service (service life) established in each case for usable capital assets must be determined on a realistic basis which takes into consideration such factors as type of construction, nature of the equipment used, technological developments in the particular research area, and the renewal and replacement policies followed for the individual items or classes of assets involved. Where the depreciation method is introduced for application to assets acquired in prior years, the annual charges therefrom must not exceed the amounts that would have resulted had the depreciation method been in effect from the date of acquisition of such assets.

(5) Depreciation on idle or excess facilities shall not be allowed except on such facilities as are reasonably necessary for standby purposes.

(6) Where an institution elects to go on a depreciation basis for a particular class of assets, no depreciation, rental or use charge may be allowed on any such assets that would be viewed as fully depreciated; provided, however, that reasonable use charges may be negotiated for any such assets if warranted after taking into consideration the cost of the facility or item involved, the estimated useful life remaining at time of negotiation, the actual replacement policy followed in the light of service lives used for calculating depreciation, the effect of any increased maintenance charges or decreased efficiency due to age, and any other factors pertinent to the utilization of the facility or item for the purpose contemplated.

(7) Hospitals which choose a depreciation allowance for assets purchased prior to 1966 based on a percentage of operating costs in lieu of normal depreciation for purposes of reimbursement under Pub. L. 89-97 (Medicare) shall utilize that method for determining depreciation applicable to organized research.

The operating costs to be used are the lower of the hospital's 1965 operating costs or the hospital's current year's allowable costs. The percent to be applied is 5 percent starting with the year 1966-67, with such percentage being uniformly reduced by one-half percent each succeeding year. The allowance based on operating costs is in addition to regular depreciation on assets acquired after 1965. However, the combined amount of such allowance on pre-1966 assets and the allowance for actual depreciation on assets acquired after 1965 may not exceed 6 percent of the hospital's allowable cost for the current year. After total depreciation has been computed, allocation methods are used to determine the share attributable to organized research.

For purposes of this section, *Operating Costs* means the total costs incurred by the hospital in operating the institution, and includes patient care, research, and other activities. *Allowable Costs* means operating costs less unallowable costs as defined in these principles; by the application of allocation methods to the total amount of such allowable costs, the share attributable to Federally-sponsored research is determined.

A hospital which elects to use this procedure under Pub. L. 89-97 and subsequently changes to an actual depreciation basis on pre-1966 assets in accordance with the option afforded under the Medicare program shall simultaneously change to an actual depreciation basis for organized research.

Where the hospital desires to change to actual depreciation but either has no historical cost records or has incomplete records, the determination of historical cost could be made through appropriate means involving expert consultation with the determination being subject to review and approval by the Department of Health and Human Services.

(8) Where the use allowance method is followed, the use allowance for buildings and improvements will be computed at an annual rate not exceeding two percent of acquisition cost. The use allowance for equipment will be computed at an annual rate not exceeding six and two-thirds percent of acquisition cost of usable equipment in those cases where the institution maintains current records with respect to such equipment on hand. Where the institution's records reflect only the cost (actual or estimated) of the

original complement of equipment, the use allowance will be computed at an annual rate not exceeding ten percent of such cost. Original complement for this purpose means the complement of equipment initially placed in buildings to perform the functions currently being performed in such buildings; however, where a permanent change in the function of a building takes place, a redetermination of the original complement of equipment may be made at that time to establish a new original complement. In those cases where no equipment records are maintained, the institution will justify a reasonable estimate of the acquisition cost of usable equipment which may be used to compute the use allowance at an annual rate not exceeding six and two-thirds percent of such estimate.

(9) Depreciation and/or use charges should usually be allocated to research and other activities as an indirect cost.

j. Employee morale, health, and welfare costs and credits.

The costs of house publications, health or first-aid benefits, recreational activities, employees' counseling services, and other expenses incurred in accordance with the hospital's established practice or custom for the improvement of working conditions, employer-employee relations, employee morale, and employee performance, are allowable. Such costs will be equitably apportioned to all activities of the hospital. Income generated from any of these activities will be credited to the cost thereof unless such income has been irrevocably set over to employee welfare organizations.

k. Entertainment costs.

Except as pertains to j. above, costs incurred for amusement, social activities, entertainment, and any items relating thereto, such as meals, lodging, rentals, transportation, and gratuities are unallowable.

l. Equipment and other facilities.

The cost of equipment or other facilities are allowable on a direct charge basis where such purchases are approved by the sponsoring agency concerned or provided for by the terms of the research agreement.

m. Fines and penalties.

Costs resulting from violations of, or failure of the institution to comply with federal, state and local laws and regulations are unallowable except when incurred as a result of compliance with specific provisions of the research agreement, or instructions in writing from the awarding agency.

n. Insurance and indemnification.

(1) Costs of insurance required or approved and maintained pursuant to the research agreement are allowable.

(2) Costs of other insurance maintained by the hospital in connection with the general conduct of its activities are allowable subject to the following limitations: (i) Types and extent and cost of coverage must be in accordance with sound institutional practice; (ii) costs of insurance or of any contributions to any reserve covering the risk of loss of or damage to government owned property are unallowable except to the extent that the Government has specifically required or approved such costs; and (iii) costs of insurance on the lives of officers or trustees are unallowable except where such insurance is part of an employee plan which is not unduly restricted.

(3) Contributions to a reserve for an approved self-insurance program are allowable to the extent that the types of coverage, extent of coverage, and the rates and premiums would have been allowed had

insurance been purchased to cover the risks. Such contributions are subject to prior approval of the Government.

(4) Actual losses which could have been covered by permissible insurance (through an approved self-insurance program or otherwise) are unallowable unless expressly provided for in the research agreement, except that costs incurred because of losses not covered under nominal deductible insurance coverage provided in keeping with sound management practice as well as minor losses not covered by insurance such as spoilage, breakage and disappearance of small hand tools which occur in the ordinary course of operations are allowable.

o. Interest, fund raising and investment management costs.

(1) Costs incurred for interest on borrowed capital or temporary use of endowment funds, however represented, are unallowable.

(2) Costs of organized fund raising, including financial campaigns, endowment drives, solicitation of gifts and bequests, and similar expenses incurred solely to raise capital or obtain contributions are not allowable.

(3) Costs of investment counsel and staff and similar expenses incurred solely to enhance income from investments are not allowable.

(4) Costs related to the physical custody and control of monies and securities are allowable.

p. Labor relations costs.

Costs incurred in maintaining satisfactory relations between the hospital and its employees, including costs of labor management committees, employees' publications, and other related activities are allowable.

q. Losses on research agreements or contracts.

Any excess of costs over income under any agreement or contract of any nature is unallowable. This includes, but is not limited to, the hospital's contributed portion by reason of cost-sharing agreements, under-recoveries through negotiation of flat amounts for overhead, or legal or administrative limitations.

r. Maintenance and repair costs.

(1) Costs necessary for the upkeep of property (including government property unless otherwise provided for), which neither add to the permanent value of the property nor appreciably prolong its intended life, but keep it in an efficient operating condition, are to be treated as follows:

i. Normal maintenance and repair costs are allowable;

ii. Extraordinary maintenance and repair costs are allowable, provided they are allocated to the periods to which applicable for purposes of determining research costs.

(2) Expenditures for plant and equipment, including rehabilitation thereof, which according to generally accepted accounting principles as applied under the hospital's established policy, should be capitalized and subjected to depreciation, are allowable only on a depreciation basis.

s. *Material costs.*

Costs incurred for purchased materials, supplies and fabricated parts directly or indirectly related to the research agreement, are allowable. Purchases made specifically for the research agreement should be charged thereto at their actual prices after deducting all cash discounts, trade discounts, rebates, and allowances received by the institution. Withdrawals from general stores or stockrooms should be charged at their cost under any recognized method of pricing stores withdrawals conforming to sound accounting practices consistently followed by the hospital. Incoming transportation charges are a proper part of material cost. Direct material cost should include only the materials and supplies actually used for the performance of the research agreement, and due credit should be given for any excess materials retained or returned to vendors. Due credit should be given for all proceeds or value received for any scrap resulting from work under the research agreement. Where government donated or furnished material is used in performing the research agreement, such material will be used without charge.

t. *Memberships, subscriptions and professional activity costs.*

(1) Costs of the hospital's membership in civic, business, technical and professional organizations are allowable.

(2) Costs of the hospital's subscriptions to civic, business, professional and technical periodicals are allowable.

(3) Costs of meetings and conferences, when the primary purpose is the dissemination of technical information, are allowable. This includes costs of meals, transportation, rental of facilities, and other items incidental to such meetings or conferences.

u. *Organization costs.*

Expenditures such as incorporation fees, attorneys' fees, accountants' fees, brokers' fees, fees to promoters and organizers in connection with (1) organization or reorganization of a hospital, or (2) raising capital, are unallowable.

v. *Other business expenses.*

Included in this item are such recurring expenses as registry and transfer charges resulting from changes in ownership of securities issued by the hospital, cost of shareholders meetings preparation and publication of reports to shareholders, preparation and submission of required reports and forms to taxing and other regulatory bodies, and incidental costs of directors and committee meetings. The above and similar costs are allowable when allocated on an equitable basis.

w. *Patient care.*

The cost of routine and ancillary or special services to research patients is an allowable direct cost of research agreements.

(1) Routine services shall include the costs of the regular room, dietary and nursing services, minor medical and surgical supplies and the use of equipment and facilities for which a separate charge is not customarily made.

(2) Ancillary or special services are the services for which charges are customarily made in addition to routine services, such as operating rooms, anesthesia, laboratory, BMR-EKG, etc.

(3) Patient care, whether expressed as a rate or an amount, shall be computed in a manner consistent with the procedures used to determine reimbursable costs under Pub. L. 89-97 (Medicare Program) as defined under the "Principles of Reimbursement For Provider Costs" published by the Social Security Administration of the Department of Health and Human Services. The allowability of specific categories of cost shall be in accordance with those principles rather than the principles for research contained herein. In the absence of participation in the Medicare program by a hospital, all references to the Medicare program in these principles shall be construed as meaning the Medicaid program.

i. Once costs have been recognized as allowable, the indirect costs or general service center's cost shall be allocated (stepped-down) to special service centers, and all patient and nonpatient costs centers based upon actual services received or benefiting these centers.

ii. After allocation, routine and ancillary costs shall be apportioned to scatter-bed research patients on the same basis as is used to apportion costs to Medicare patients, *i.e.* using either the departmental method or the combination method, as those methods are defined by the Social Security Administration; except that final settlement shall be on a grant-by-grant basis. However, to the extent that the Social Security Administration has recognized any other method of cost apportionment, that method generally shall also be recognized as applicable to the determination of research patient care costs.

iii. A cost center must be established on Medicare reimbursement forms for each discrete-bed unit grant award received by a hospital. Routine costs should be stepped-down to this line item(s) in the normal course of stepping-down costs under Medicare/Medicaid requirements. However, in stepping-down routine costs, consideration must be given to preventing a step-down of those costs to discrete-bed unit line items that have already been paid for directly by the grant, such as bedside nursing costs. Ancillary costs allocable to research discrete-bed units shall be determined and proposed in accordance with paragraph w.(3).ii.

(4) Where federally sponsored research programs provide specifically for the direct reimbursement of nursing, dietary, and other services, appropriate adjustment must be made to patient care costs to preclude duplication and/or misallocation of costs.

x. *Patent costs.*

Costs of preparing disclosures, reports and other documents required by the research agreement and of searching the art to the extent necessary to make such invention disclosures are allowable. In accordance with the clauses of the research agreement relating to patents, costs of preparing documents and any other patent costs, in connection with the filing of a patent application where title is conveyed to the Government, are allowable. (See also paragraph l.2.jj.)

y. *Pension plan costs.*

Costs of the hospital's pension plan which are incurred in accordance with the established policies of the institution are allowable, provided such policies meet the test of reasonableness and the methods of cost allocation are not discriminatory, and provided appropriate adjustments are made for credits or gains arising out of normal and abnormal employee turnover or any other contingencies that can result in forfeitures by employees which inure to the benefit of the hospital.

z. *Plan security costs.*

Necessary expenses incurred to comply with government security requirements including wages, uniforms and equipment of personnel engaged in plant protection are allowable.

aa. *Pre-research agreement costs.*

Costs incurred prior to the effective date of the research agreement, whether or not they would have been allowable thereunder if incurred after such date, are unallowable unless specifically set forth and identified in the research agreement.

bb. Professional services costs.

(1) Costs of professional services rendered by the members of a particular profession who are not employees of the hospital are allowable subject to (2) and (3) below when reasonable in relation to the services rendered and when not contingent upon recovery of the costs from the Government. Retainer fees to be allowable must be reasonably supported by evidence of services rendered.

(2) Factors to be considered in determining the allowability of costs in a particular case include (i) the past pattern of such costs, particularly in the years prior to the award of government research agreements on the institution's total activity; (ii) the nature and scope of managerial services expected of the institution's own organizations; and (iii) whether the proportion of government work to the hospital's total activity is such as to influence the institution in favor of incurring the cost, particularly where the services rendered are not of a continuing nature and have little relationship to work under government research agreements.

(3) Costs of legal, accounting and consulting services, and related costs incurred in connection with organization and reorganization or the prosecution of claims against the Government are unallowable. Costs of legal, accounting and consulting services, and related costs incurred in connection with patent infringement litigation are unallowable unless otherwise provided for in the research agreement.

cc. Profits and losses on disposition of plant equipment, or other assets.

Profits or losses of any nature arising from the sale or exchange of plant, equipment, or other capital assets, including sales or exchange of either short- or long-term investments, shall be excluded in computing research agreement costs.

dd. Proposal costs.

Proposal costs are the costs of preparing bids or proposals on potential government and non-government research agreements or projects, including the development of technical data and cost data necessary to support the institution's bids or proposals. Proposal costs of the current accounting period of both successful and unsuccessful bids and proposals normally should be treated as indirect costs and allocated currently to all activities of the institution, and no proposal costs of past accounting periods will be allocable in the current period to the government research agreement. However, the institution's established practices may be to treat proposal costs by some other recognized method. Regardless of the methods used, the results obtained may be accepted only if found to be reasonable and equitable.

ee. Public information services costs.

Costs of news releases pertaining to specific research or scientific accomplishment are unallowable unless specifically authorized by the sponsoring agency.

ff. Rearrangement and alteration costs.

Costs incurred for ordinary or normal rearrangement and alteration of facilities are allowable. Special rearrangement and alteration costs incurred specifically for a project are allowable only as a direct charge when such work has been approved in advance by the sponsoring agency concerned.

gg. Reconversion costs.

Costs incurred in the restoration or rehabilitation of the institution's facilities to approximately the same condition existing immediately prior to commencement of government research agreement work, fair wear and tear excepted, are allowable.

hh. *Recruiting costs.*

(1) Subject to (2), (3), and (4) below, and provided that the size of the staff recruited and maintained is in keeping with workload requirements, costs of "help wanted" advertising, operating costs of an employment office necessary to secure and maintain an adequate staff, costs of operating an aptitude and educational testing program, travel costs of employees while engaged in recruiting personnel, travel costs of applicants for interviews for prospective employment, and relocation costs incurred incident to recruitment of new employees are allowable to the extent that such costs are incurred pursuant to a well-managed recruitment program. Where an institution uses employment agencies, costs not in excess of standard commercial rates for such services are allowable.

(2) In publications, costs of help wanted advertising that includes color, includes advertising material for other than recruitment purposes, or is excessive in size (taking into consideration recruitment purposes for which intended and normal institutional practices in this respect) are unallowable.

(3) Costs of help wanted advertising, special emoluments; fringe benefits, and salary allowances incurred to attract professional personnel from other institutions that do not meet the test of reasonableness or do not conform with the established practices of the institution are unallowable.

(4) Where relocation costs incurred incident to recruitment of a new employee have been allowed either as an allocable direct or indirect cost, and the newly hired employee resigns for reasons within his control within twelve months after hire, the institution will be required to refund or credit such relocation costs as were charged to the Government.

ii. *Rental costs (including sale and lease-back of facilities).*

(1) Rental costs of land, building, and equipment and other personal property are allowable if the rates are reasonable in light of such factors as rental costs of comparable facilities and market conditions in the area, the type, life expectancy, condition, and value of the facilities leased, options available, and other provisions of the rental agreement. Application of these factors, in situations where rentals are extensively used, may involve among other considerations comparison of rental costs with the amount which the hospital would have received had it owned the facilities.

(2) Charges in the nature of rent between organizations having a legal or other affiliation or arrangement such as hospitals, medical schools, foundations, etc., are allowable to the extent such charges do not exceed the normal costs of ownership such as depreciation, taxes, insurance, and maintenance, provided that no part of such costs shall duplicate any other allowed costs.

(3) Unless otherwise specifically provided in the agreement, rental costs specified in sale and lease-back agreements incurred by hospitals through selling plant facilities to investment organizations such as insurance companies or to private investors, and concurrently leasing back the same facilities are allowable only to the extent that such rentals do not exceed the amount which the hospital would have received had it retained legal title to the facilities.

jj. *Royalties and other costs for use of patents.*

Royalties on a patent or amortization of the cost of acquiring a patent or invention or rights thereto necessary for the proper performance of the research agreement and applicable to tasks or processes thereunder are allowable unless the Government has a license or the right to free use of the patent, the

patent has been adjudicated to be invalid, or has been administratively determined to be invalid, the patent is considered to be unenforceable, or the patent has expired.

kk. Severance pay.

(1) Severance pay is compensation in addition to regular salaries and wages which is paid by a hospital to employees whose services are being terminated. Costs of severance pay are allowable only to the extent that such payments are required by law, by employer-employee agreement, by established policy that constitutes in effect an implied agreement on the institution's part, or by circumstances of the particular employment.

(2) Severance payments that are due to normal, recurring turnover, and which otherwise meet the conditions of (a) above may be allowed provided the actual costs of such severance payments are regarded as expenses applicable to the current fiscal year and are equitably distributed among the institution's activities during that period.

(3) Severance payments that are due to abnormal or mass terminations are of such conjectural nature that allowability must be determined on a case-by-case basis. However, the Government recognizes its obligation to participate to the extent of its fair share in any specific payment.

ll. Specialized service facilities operated by a hospital.

(1) The costs of institutional services involving the use of highly complex and specialized facilities such as electronic computers and reactors are allowable provided the charges therefor meet the conditions of (2) or (3) below, and otherwise take into account any items of income or federal financing that qualify as applicable credits under paragraph C.5.

(2) The costs of such hospital services normally will be charged directly to applicable research agreements based on actual usage or occupancy of the facilities at rates that (i) are designed to recover only actual costs of providing such services, and (ii) are applied on a nondiscriminatory basis as between organized research and other work of the hospital including commercial or accommodation sales and usage by the hospital for internal purposes. This would include use of such facilities as radiology, laboratories, maintenance men used for a special purpose, medical art, photography, etc.

(3) In the absence of an acceptable arrangement for direct costing as provided in (2) above, the costs incurred for such institutional services may be assigned to research agreements as indirect costs, provided the methods used achieve substantially the same results. Such arrangements should be worked out in coordination with all government users of the facilities in order to assure equitable distribution of the indirect costs.

mm. Special administrative costs.

Costs incurred for general public relations activities, catalogs, alumni activities, and similar services are unallowable.

nn. Staff and/or employee benefits.

(1) Staff and/or employee benefits in the form of regular compensation paid to employees during periods of authorized absences from the job such as for annual leave, sick leave, military leave and the like are allowable provided such costs are absorbed by all hospital activities including organized research in proportion to the relative amount of time or effort actually devoted to each.

(2) Staff benefits in the form of employer contributions or expenses for Social Security taxes, employee insurance, Workmen's Compensation insurance, the Pension Plan (see paragraph 1.2.y.), hospital costs or remission of hospital charges to the extent of costs for individual employees or their families, and the like are allowable provided such benefits are granted in accordance with established hospital policies, and provided such contributions and other expenses whether treated as indirect costs or an increment of direct labor costs are distributed to particular research agreements and other activities in a manner consistent with the pattern of benefits accruing to the individuals or groups of employees whose salaries and wages are chargeable to such research agreements and other activities.

oo. *Taxes.*

(1) In general, taxes which the hospital is required to pay and which are paid or accrued in accordance with generally accepted accounting principles, and payments made to local governments in lieu of taxes which are commensurate with the local government services received are allowable except for (i) taxes from which exemptions are available to the hospital directly or which are available to the hospital based on an exemption afforded the Government and in the latter case when the sponsoring agency makes available the necessary exemption certificates, (ii) special assessments on land which represent capital improvements, and (iii) Federal Income Taxes.

(2) Any refund of taxes, interest, or penalties, and any payment to the hospital of interest thereon attributable to taxes, interest or penalties, which were allowed as research agreement costs will be credited or paid to the Government in the manner directed by the Government provided any interest actually paid or credited to a hospital incident to a refund of tax, interest, and penalty will be paid or credited to the Government only to the extent that such interest accrued over the period during which the hospital had been reimbursed by the Government for the taxes, interest, and penalties.

pp. *Transportation costs.*

Costs incurred for inbound freight, express, cartage, postage and other transportation services relating either to goods purchased, in process, or delivered are allowable. When such costs can readily be identified with the items involved, they may be charged directly as transportation costs or added to the cost of such items. Where identification with the material received cannot readily be made, inbound transportation costs may be charged to the appropriate indirect cost accounts if the institution follows a consistent equitable procedure in this respect. Outbound freight, if reimbursable under the terms of the research agreement, should be treated as a direct cost.

qq. *Travel costs.*

(1) Travel costs are the expenses for transportation, lodging, subsistence, and related items incurred by employees who are in travel status on official business of the hospital. Such costs may be charged on an actual basis, on a per diem or mileage basis in lieu of actual costs incurred, or on a combination of the two provided the method used is applied to an entire trip and not to selected days of the trip, and results in charges consistent with those normally allowed by the institution in its regular operations.

(2) Travel costs are allowable subject to (3) and (4) below when they are directly attributable to specific work under a research agreement or when they are incurred in the normal course of administration of the hospital or a department or research program thereof.

(3) The difference in cost between first class air accommodations and less than first class air accommodations is unallowable except when less than first class air accommodations are not reasonably available to meet necessary mission requirements such as where less than first class accommodations would (i) require circuitous routing, (ii) require travel during unreasonable hours, (iii) greatly increase the

duration of the flight, (iv) result in additional costs which would offset the transportation savings, or (v) offer accommodations which are not reasonably adequate for the medical needs of the traveler.

(4) Costs of personnel movements of a special or mass nature are allowable only when authorized or approved in writing by the sponsoring agency or its authorized representative.

rr. Termination costs applicable to contracts.

(1) Contract terminations generally give rise to the incurrence of costs or to the need for special treatment of costs which would not have arisen had the contract not been terminated. Items peculiar to termination are set forth below. They are to be used in conjunction with all other provisions of these principles in the case of contract termination.

(2) The cost of common items of material reasonably usable on the hospital's other work will not be allowable unless the hospital submits evidence that it could not retain such items at cost without sustaining a loss. In deciding whether such items are reasonably usable on other work of the institution, consideration should be given to the hospital's plans for current scheduled work or activities including other research agreements. Contemporaneous purchases of common items by the hospital will be regarded as evidence that such items are reasonably usable on the hospital's other work. Any acceptance of common items as allowable to the terminated portion of the contract should be limited to the extent that the quantities of such items on hand, in transit, and on order are in excess of the reasonable quantitative requirement of other work.

(3) If in a particular case, despite all reasonable efforts by the hospital, certain costs cannot be discontinued immediately after the effective date of termination, such costs are generally allowable within the limitations set forth in these principles, except that any such costs continuing after termination due to the negligent or willful failure of the hospital to discontinue such costs will be considered unacceptable.

(4) Loss of useful value of special tooling and special machinery and equipment is generally allowable, provided (i) such special tooling, machinery or equipment is not reasonably capable of use in the other work of the hospital; (ii) the interest of the Government is protected by transfer of title or by other means deemed appropriate by the contracting officer; and (iii) the loss of useful value as to any one terminated contract is limited to that portion of the acquisition cost which bears the same ratio to the total acquisition cost as the terminated portion of the contract bears to the entire terminated contract and other government contracts for which the special tooling, special machinery or equipment was acquired.

(5) Rental costs under unexpired leases are generally allowable where clearly shown to have been reasonably necessary for the performance of the terminated contract, less the residual value of such leases, if (i) the amount of such rental claimed does not exceed the reasonable use value of the property leased for the period of the contract and such further period as may be reasonable; and (ii) the hospital makes all reasonable efforts to terminate, assign, settle, or otherwise reduce the cost of such lease. There also may be included the cost of alterations of such leased property, provided such alterations were necessary for the performance of the contract and of reasonable restoration required by the provisions of the lease.

(6) Settlement expenses including the following are generally allowable: (i) Accounting, legal, clerical, and similar costs reasonably necessary for the preparation and presentation to contracting officers of settlement claims and supporting data with respect to the terminated portion of the contract and the termination and settlement of subcontracts; and (ii) reasonable costs for the storage, transportation, protection, and disposition of property provided by the Government or acquired or produced by the institution for the contract.

(7) Subcontractor claims including the allocable portion of claims which are common to the contract and to other work of the contractor are generally allowable.

ss. *Voluntary services*.

The value of voluntary services provided by sisters or other members of religious orders is allowable provided that amounts do not exceed that paid other employees for similar work. Such amounts must be identifiable in the records of the hospital as a legal obligation of the hospital. This may be reflected by an agreement between the religious order and the hospital supported by evidence of payments to the order.

Appendix X to Part 75—Data Collection Form (SF-SAC)

The Data Collection Form SF-SAC is available on the FAC Web site.

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3019, Jan. 20, 2016]

Appendix XI to Part 75—Compliance Supplement

The compliance supplement is available on the OMB Web site: (e.g., for 2013 here: <http://www.whitehouse.gov/omb/circulars/>)

[79 FR 75889, Dec. 19, 2014, as amended at 81 FR 3019, Jan. 20, 2016]

Appendix XII to Part 75—Award Term and Conditions for Recipient Integrity and Performance Matters

A. REPORTING OF MATTERS RELATED TO RECIPIENT INTEGRITY AND PERFORMANCE

1. General Reporting Requirement

If the total value of your currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of this Federal award, then you as the recipient during that period of time must maintain the currency of information reported to the System for Award Management (SAM) that is made available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System (FAPIIS)) about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition. This is a statutory requirement under section 872 of Public Law 110-417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111-212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.

2. Proceedings About Which You Must Report

Submit the information required about each proceeding that:

a. Is in connection with the award or performance of a grant, cooperative agreement, or procurement contract from the Federal Government;

b. Reached its final disposition during the most recent five year period; and

c. If one of the following:

(1) A criminal proceeding that resulted in a conviction, as defined in paragraph 5 of this award term and condition;

(2) A civil proceeding that resulted in a finding of fault and liability and payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more;

(3) An administrative proceeding, as defined in paragraph 5 of this award term and condition, that resulted in a finding of fault and liability and your payment of either a monetary fine or penalty of \$5,000 or more or reimbursement, restitution, or damages in excess of \$100,000; or

(4) Any other criminal, civil, or administrative proceeding if:

(i) It could have led to an outcome described in paragraph 2.c.(1), (2), or (3) of this award term and condition;

(ii) It had a different disposition arrived at by consent or compromise with an acknowledgement of fault on your part; and

(iii) The requirement in this award term and condition to disclose information about the proceeding does not conflict with applicable laws and regulations.

3. Reporting Procedures

Enter in the SAM Entity Management area the information that SAM requires about each proceeding described in paragraph 2 of this award term and condition. You do not need to submit the information a second time under assistance awards that you received if you already provided the information through SAM because you were required to do so under Federal procurement contracts that you were awarded.

4. Reporting Frequency

During any period of time when you are subject to this requirement in paragraph 1 of this award term and condition, you must report proceedings information through SAM for the most recent five year period, either to report new information about any proceeding(s) that you have not reported previously or affirm that there is no new information to report. Recipients that have Federal contract, grant, and cooperative agreement awards with a cumulative total value greater than \$10,000,000 must disclose semiannually any information about the criminal, civil, and administrative proceedings.

5. Definitions

For purposes of this award term and condition:

a. Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative proceedings, Civilian Board of Contract Appeals proceedings, and Armed Services Board of Contract Appeals proceedings). This includes proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include audits, site visits, corrective plans, or inspection of deliverables.

b. Conviction, for purposes of this award term and condition, means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, and includes a conviction entered upon a plea of nolo contendere.

c. Total value of currently active grants, cooperative agreements, and procurement contracts includes—

(1) Only the Federal share of the funding under any Federal award with a recipient cost share or match; and

(2) The value of all expected funding increments under a Federal award and options, even if not yet exercised

B. [Reserved]

[81 FR 3019, Jan. 20, 2016]

CERTIFICATE OF SERVICE

I, Cynthia Hook, hereby certify that a copy of this permit has been mailed by first class mail to Arkansas Electric Cooperative Corporation - Thomas B. Fitzhugh Generating Station, P.O. Box 194208, Little Rock, AR, 72219, on this 20th day of September, 2016.

A handwritten signature in black ink, appearing to read 'C. Hook', written over a horizontal line.

Cynthia Hook, ASIII, Air Division