#### **RESPONSE TO COMMENTS**

#### CORRELL, INC.

#### **PERMIT #0814-AOP-R5**

AFIN: 24-00057

On 11/10/12 and 11/21/12, 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 Lisa Reed 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:

<u>Header (pages 2 - 14)</u>: The header on pages 2 to 14 identifies the permit number as 0814-AOP-R4. Please update to 0814-AOP-R5.

# **Response to Comment #1:**

The permit was updated.

#### Comment #2:

<u>Section IV: Emissions Summary</u>. Please correct the total allowable emissions VOC lb/hr value to be 110.0 lb/hr instead of 101.0 lb/hr. This value matches the sum of the VOC values.

EMISSION SUMMARY					
Source	Description	Pollutant	Emission I	Rates	
Number	Description		lb/hr	tpy	
		PM	3.1	1.4	
		PM <sub>10</sub>	1.7	0.9	
Total Allowel	alo Emiggiona	$SO_2$	0.7	0.4	
Total Allowable Emissions	ole Ellissions —	VOC	<del>101.0</del> -110.0	247.1	
		CO	1.7	2.1	
		$NO_X$	5.5	2.7	

# **Response to Comment #2:**

The permit was updated.

#### Comment #3:

<u>Section IV: Specific Condition, SC #23</u>. We request this condition be deleted entirely as shown below. The Diesel Fire Water Pump (SN-19) is not subject to any emission limitations under 40 CFR 63 Subpart ZZZZ.

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 (see Performance Tests below) 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 which apply to you.

[Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6603(a)]

# **Response to Comment #3:**

The permit was updated.

#### Comment #4:

<u>Section IV: Specific Condition, SC #24</u>. For clarification of the type of stationary RICE that SN-19 is it is requested that ADEQ update the insert of Subpart ZZZZ Table 2d as follows:

For each	You must meet the following requirement, except during periods of startup	During periods of startup you must
, ,	500 hours of operation or annually, whichever comes first; 1	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.
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

## **Response to Comment #4:**

The permit was updated.

# Comment #5:

<u>Section IV: Specific Condition, SC #25</u>. For clarification of applicable requirements we request the condition be modified as follows:

If you own or operate any of the following stationary RICE, you must— The permittee shall operate and maintain the stationary RICE the engine 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:

a. An existing emergency or black start stationary RICE located at an area source of HAP emissions:

[Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6625(e)(3)]

## **Response to Comment #5:**

The permit was updated, but "the stationary RICE" was left unchanged.

#### Comment #6:

<u>Section IV: Specific Condition, SC #26</u>. For clarification of applicable requirements we request the condition be modified as follows:

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 The permittee shall install a non-resettable hour meter if one is not already installed on the engine. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6625(f)]

# **Response to Comment #6:**

The permit was updated, but "on the engine" was left out.

#### Comment #7:

<u>Section IV: Specific Condition, SC #27</u>. For clarification of applicable requirements we request the condition be modified as follows:

If you operate an new, reconstructed, or existing stationary engine, you must The permittee shall 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. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6625(h)]

## Response to Comment #7:

The permit was updated.

#### Comment #8:

<u>Section IV: Specific Condition, SC #28</u>. For clarification of applicable requirements we request the condition be modified as follows:

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 The permittee has 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 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 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. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6625(i)]

# **Response to Comment #8:**

The permit was updated.

#### Comment #9:

<u>Section IV: Specific Condition, SC #29</u>. For clarification of applicable requirements we request the condition be modified as follows:

You must The permittee shall be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6605(a)]

# **Response to Comment #9:**

The permit was updated.

#### Comment #10:

<u>Section IV: Specific Condition, SC #30</u>. For clarification of applicable requirements we request the condition be modified as follows:

At all times you must the permittee shall 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. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6605(b)]

## **Response to Comment #10:**

The permit was updated.

#### Comment #11:

<u>Section IV: Specific Condition, SC #31</u>. For clarification of applicable requirements we request the condition be modified as follows:

You must The permittee shall demonstrate continuous compliance with each emission limitation and operating limitation 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. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6640(a)]

# **Response to Comment #11:**

This condition was replaced with Specific Condition #32.

#### Comment #12:

<u>Section IV: Specific Condition, SC #32</u>. We request this condition be deleted entirely as shown below. The compliance requirements are redundant and are already specified in specific condition 29 and 30.

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:

<del>For each</del>	Complying with the requirement to	You must demonstrate continuous compliance by
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing nonemergency 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 landfill or digester gas stationary SI RICE located at an area source of HAP, 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 24 hours or less per calendar year	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.

[Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63 Subpart ZZZZ Table 6]

## **Response to Comment #12:**

This condition replaced Specific Condition #31 and can't be removed.

#### Comment #13:

<u>Section IV: Specific Condition, SC #33</u>. For clarification of applicable requirements we request the condition be modified as follows:

You must The permittee shall report each instance in which you the permittee 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 the engine. 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(f). 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. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6640(b)]

# **Response to Comment #13:**

The permit was updated.

#### Comment #14:

<u>Section IV: Specific Condition, SC #34.</u> We request this condition be deleted entirely as shown below. 40 CFR §63.6640(d) is not applicable to SN-19 as it is an existing stationary RICE any change in this status would require a permit modification.

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). [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6640(d)]

## Response to Comment #14:

The permit was updated.

## Comment #15:

<u>Section IV: Specific Condition, SC #35.</u> We request this condition be deleted entirely as shown below. 40 CFR §63.6640(e) is not applicable to SN-19 as it is an existing stationary RICE and does not need to comply with 40 CFR 63 Subpart ZZZZ Table 8.

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. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6640(e)]

#### **Response to Comment #15:**

The permit was updated.

#### Comment #16:

<u>Section IV: Specific Condition, SC #36</u>. For clarification of applicable requirements we request the condition be modified as follows:

Requirements for emergency stationary RICE.

- a. 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, 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 was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must The permittee shall operate the emergency stationary RICE engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.
  - i. There is no time limit on the use of emergency stationary RICE in emergency situations.
  - ii. You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. 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 year.
  - iii. You may operate your emergency stationary RICE up to 50 hours per year in nonemergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for nonemergency situations cannot be used for peak shaving 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; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are

emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

[Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6640(f)(1)(i-iii)]

## **Response to Comment #16:**

The permit was updated.

## Comment #17:

<u>Section IV: Specific Condition, SC #37</u>. For clarification of applicable requirements we request the condition be modified as follows:

If you must comply with the emission and operating limitations, you must The permittee shall keep the records: described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

- a. 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).
- b. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
- c. Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
- d. Records of all required maintenance performed on the air pollution control and monitoring equipment.
- e. 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.

[Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6655(a)(1-5(2) and (a)(5) and 63.6655(d)]

#### Response to Comment #17:

The permit was updated.

#### Comment #18:

Section IV: Specific Condition, SC #38. We request this condition be deleted entirely as shown below. 40 CFR §63.6655(b)(1-3) is not applicable to SN-19 as it does not have a CEMS or CPMS device installed.

For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

- a. Records described in §63.10(b)(2)(vi) through (xi).
- b. Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).
- c. Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

[Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6655(b)(1-3)]

#### **Response to Comment #18:**

The permit was updated.

#### Comment #19:

<u>Section IV: Specific Condition, SC #39</u>. We request this condition be deleted entirely as shown below. The compliance requirement is redundant with specific condition 37.

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. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6655(d)]

## **Response to Comment #19:**

The permit was updated.

#### Comment #20:

<u>Section IV: Specific Condition, SC #40</u>. For clarification of applicable requirements we request the condition be modified as follows:

You must The permittee shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you the permittee 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;

- a. An existing stationary emergency RICE.
- b. An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

# Response to Comment #20:

The permit was updated, but part (a) was left to describe the source.

#### Comment #21:

<u>Section IV: Specific Condition, SC #41</u>. For clarification of applicable requirements we request the condition be modified as follows:

If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must. The permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must The permittee shall 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 engines are used

for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

- a. 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.
- b. An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

# **Response to Comment #21:**

The permit was updated.



January 10, 2013

Suzanne McFarland Correll, Inc. P.O. Box 417 Charleston, AR 72933

Dear Ms. McFarland:

The enclosed Permit No. 0814-AOP-R5 is your authority to construct, operate, and maintain the equipment and/or control apparatus as set forth in your application initially received on 10/3/2012.

After considering the facts and requirements of A.C.A. §8-4-101 et seq., and implementing regulations, I have determined that Permit No. 0814-AOP-R5 for the construction, operation and maintenance of an air pollution control system for Correll, Inc. to 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.

Mike Bates Chief, Air Division

# ADEQ OPERATING AIR PERMIT

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

Permit No.: 0814-AOP-R5

IS ISSUED TO:

Correll, Inc.
300 South Hancock Street
Charleston, AR 72933
Franklin County
AFIN: 24-00057

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:

January 10, 2013

AND

January 09, 2018

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

Signed:

Mike Bates

Chief, Air Division

January 10, 2013

Date

Correll, Inc.
Permit #: 0814-AOP-R5
AFIN: 24-00057

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# List of Acronyms and Abbreviations

A.C.A. Arkansas Code Annotated

AFIN ADEQ Facility Identification Number

CFR Code of Federal Regulations

CO Carbon Monoxide

HAP Hazardous Air Pollutant

lb/hr Pound Per Hour

MVAC Motor Vehicle Air Conditioner

No. Number

NO<sub>x</sub> Nitrogen Oxide

PM Particulate Matter

PM<sub>10</sub> Particulate Matter Smaller Than Ten Microns

SNAP Significant New Alternatives Program (SNAP)

SO<sub>2</sub> Sulfur Dioxide

SSM Startup, Shutdown, and Malfunction Plan

Tpy Tons Per Year

UTM Universal Transverse Mercator

VOC Volatile Organic Compound

Permit #: 0814-AOP-R5

AFIN: 24-00057

# **SECTION I: FACILITY INFORMATION**

PERMITTEE: Correll, Inc.

AFIN: 24-00057

PERMIT NUMBER: 0814-AOP-R5

FACILITY ADDRESS: 300 South Hancock Street

Charleston, AR 72933

MAILING ADDRESS: P.O. Box 417

Charleston, AR 72933

COUNTY: Franklin County

CONTACT NAME: Suzanne McFarland

TELEPHONE NUMBER: 479-965-2247

REVIEWING ENGINEER: Adam McDaniel

UTM North South (Y): Zone 15: 3906201.88 m

UTM East West (X): Zone 15: 405811.68 m

Permit #: 0814-AOP-R5

AFIN: 24-00057

#### SECTION II: INTRODUCTION

## **Summary of Permit Activity**

Correll, Incorporated (Correll) owns and operates a metal, office furniture manufacturing facility (NAICS 337214) located at 300 South Hancock in Charleston, Franklin County, Arkansas 72933. This renewal is necessary to permit an emergency diesel fire water pump (SN-19) which is subject to NESHAP 40 CFR Part 63 Subpart ZZZZ. The total annual permitted emission changes include: +0.1 tpy PM/PM<sub>10</sub>, +0.1 tpy SO<sub>2</sub>, +0.1 tpy VOC, +0.1 tpy CO, and +0.3 tpy NO<sub>X</sub>.

# **Process Description**

Correll, Inc. is a manufacturer of folding tables, bookcases and computer furniture that are sold through retail stores and directly to customers. In the manufacturing process, Correll fabricates metal parts on site, laminates and cuts particleboard, and assembles these parts into metal furniture.

# Forming Metal Legs and Aprons - Painting Preparation and Painting

Tubular steel and strip steel are cut to correct lengths, bent to the desired shapes, and punched. These pieces are welded together to form table legs and aprons. The metal table legs and aprons are conveyed to a natural gas-fired, recirculating phosphatizer bath (SN-01) and dried in a natural gas-fired dryer (SN-02) in a pre-painting preparation process. The legs and aprons are conveyed to two electrostatic paint booths (SN-03 & 04) for painting. If necessary, the pieces are also sprayed in the touch-up paint booth (SN-11A/B).

Correll is subject to 40 CFR 63 Subpart RRRR – National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Metal Furniture for this area even though the facility's hazardous air pollutants (HAP) emission levels are below major source thresholds; this was determined previously due to the EPA "once-in-always-in" rule. Material safety data sheets for the raw materials used in this area, provided by the facility, show that all paints are designated "low HAP" and the paint catalyst is designated "no HAP". The solvent used for thinning and cleaning at SN-03 & 04 and 11A/B is also considered "no HAP" by the HAP content definition of at 40 CFR 63.4941(a)(4).

After painting, the parts are dried in a natural gas-fired oven (SN-05) and are taken to assembly.

#### Assembly Table Tops and Shelves

Particleboard is processed by applying a paper laminate (which can be received with a layer of hot glue pre-attached to the backside) using heat and pressure to form the table tops. Tops may also have Formica-type high pressure laminate sheets attached by gluing them with water based glue. Any potential emissions from this gluing process prior to the press is an Insignificant Activity.

After lamination, the particleboards are sawed to the correct size and the edges of the tabletops are routed so a plastic band may be placed around them. Sawdust from the sawing and routing operations (SN-15) is controlled through a baghouse in conjunction with a cyclone. Emissions are quantified from the sawdust handling and loading process, where a cyclone drops the sawdust into the bin for off-site shipment (SN-18). Any sanding required is completed with

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small hand-held sanders that are exempt from permitting (Insignificant Activity Group B-17). Some pieces for bookcases require holes and these are drilled on two boring machines.

Any final touch-up painting (SN-16) needed is completed with aerosol cans. Aerosol paint cans are exempt from 40 CFR Part 63 Subpart RRRR – National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Metal Furniture.

Once the tabletops are completed, they are assembled with the lower apron and legs. This completes the manufacturing process and the metal furniture is packed for shipping. Packaging for shipping (SN-17) includes a manual step to reinforce the corners of the packing material through use of hot melt glue, tape, and occasionally a spray adhesive. The spray adhesive, which is used in Packaging (SN-17), generates non-point VOC and acetone emissions. Correll uses stencil ink (an Insignificant Activity) to prepare the table's packaging for shipment.

# Maintenance Shop

A small dip tank Parts Washer (SN-14) to clean equipment parts from the process is located in the Maintenance Shop. The solvents used in the Parts Washer are estimated at 100% VOC and include trace amounts of hazardous air pollutants to allow the facility flexibility in purchasing solvent.

A diesel fired emergency engine is maintained on site to power the fire water pump in the event of an emergency. SN-19 is a 250 HP compression ignition emergency diesel fire water pump which was installed in 1990 and is subject to NESHAP 40 CFR Part 63 Subpart ZZZZ. This engine was an insignificant activity.

# Regulations

The following table contains the regulations applicable to this permit.

Regulations			
Arkansas Air Pollution Control Code, Regulation 18, effective June 18, 2010			
Regulations of the Arkansas Plan of Implementation for Air Pollution Control,			
Regulation 19, effective July 9, 2012			
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective July			
9, 2012			
NESHAP 40 CFR Part 63 Subpart RRRR – National Emission Standards for Hazardous			
Air Pollutants for Surface Coating of Metal Furniture			
NESHAP 40 CFR Part 63 Subpart ZZZZ - National Emission Standard for Hazardous			
Air Pollutants for Stationary Reciprocating Internal Combustion Engines			

A full explanation can be found in a letter dated January 2, 2002 addressed to Ms. Anna Hubbard from GBM & Associates, which conducted the third party independent entity review on November 6, 2001. Correll was issued air permit #814-AR-1 on August 20, 1990 with this statement: "The painting booths were originally installed in the 1970's and operated essentially unchanged until 1989. In 1989 a fire destroyed the two paint booths (SN-03 and 04). Further examination of this issue revealed that prior to the issuance of Correll's Title V air permit . . . (i.e. permits 814-AR-1 through 814AR-4) contained the following language. "Correll is not subject to the Standards of Performance for Surface Coating of Metal Furniture as found in

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NSPS 40 CFR Part 60, Subpart EE, since the fixed capital expense of the painting equipment which was replaced in 1989 is less than 50% of the fixed capital expense of an entirely new metal furniture coating line." "... The installation of the touch-up booth (SN-11) in 1992 consisted of relocating an existing spray gun ... to the area outside the paint booth. It was determined that this action did not trigger NSPS Subpart EE." "The increase in maximum paint usage from 4.81 gallons/hr to 9.62 gallons/hr was achieved with no physical modification to the spray booths. After a physical measure of the spraying capacity during the preparation of the Title V permit, a slight increase of maximum hourly paint usage from 9.62 to 9.65 gallons/hr. The determination was made ... NSPS Subpart EE did not become applicable."

Correll is a metal furniture manufacturer (NAICS 337214). Correll manufactures only final products: no intermediate components, which are then used in the manufacture of wood products elsewhere, are produced. Correll does not manufacture wood furniture or wood furniture components. Therefore, Correll is not subject to the NESHAP 40 CFR Part 63, Subpart JJ.

# **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	Description	Dollytont	Emission Rates	n Rates	
Number	Description	Pollutant	lb/hr	tpy	
P		PM	3.1	1.4	
		PM <sub>10</sub>	1.7	0.9	
Total Allowable Emissions		$SO_2$	0.7	0.4	
		VOC	110.0	247.1	
			1.7	2.1	
			5.5	2.7	
		Xylene*	1.370312	3.1100156	
	HAPs	Ethyl benzene*	0.28	0.6	
	HAPS	Cumene*	0.85	1.94	
		Glycol Ether*	0.26	0.58	
Air	Contaminants **	Acetone**	0.91	0.55	
	Phognhata Wagher (Point	PM	0.1	0.1	
	Phosphate Washer (Paint	$PM_{10}$	0.1	0.1	
01	Preparation Bath) (natural	$SO_2$	0.1	0.1	
U1	gas, 2.86 MMBtu/hr and	VOC	0.9	0.8	
	1,980 gallons VOC-	CO	0.3	1.1	
	containing solvent)		0.3	1.3	

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	EMISSION SUMMARY				
Source	Description	Pollutant	Emissio	n Rates	
Number	Description	Fonutant	lb/hr	tpy	
		PM	0.1	0.1	
	During Oren (Brint	$PM_{10}$	0.1	0.1	
02	Drying Oven (Paint	$SO_2$	0.1	0.1	
02	Preparation Dryer) (natural	VOC	0.1	0.1	
	gas, 0.82 MMBtu/hr)	CO	0.1	0.3	
		$NO_X$	0.1	0.4	
		PM	0.1	0.1	
	Delay Dala Cara	$PM_{10}$	0.1	0.1	
0.5	Paint Bake Oven	$SO_2$	0.1	0.1	
05	(natural gas, 1.53	VOC	0.1	0.1	
	MMBtu/hr)	CO	0.2	0.6	
		$NO_X$	0.2	0.7	
	Electrostatic (SN-03 & 04) and Touch-up (SN-11A/B)	VOC	106.0	243.8	
02 04 0 11		Xylene*	1.34	3.07	
03, 04, & 11		Ethyl benzene*	0.26	0.58	
A/B	Paint Booths	Cumene*	0.85	1.94	
		Glycol Ether*	0.26	0.58	
		VOC	0.3	0.5	
14	Parts Washer	Xylene*	0.01	0.01	
		Ethyl benzene*	0.01	0.01	
1.5	Sawing and Routing	PM	0.1	0.1	
15	(w/baghouse & cyclone)	$PM_{10}$	0.1	0.1	
		VOC	0.7	1.5	
16	Touchum Dainting	Xylene*	0.02	0.03	
10	Touchup Painting	Ethyl benzene*	0.01	0.01	
		Acetone**	0.24	0.50	
17	Paglaging	VOC	1.5	0.2	
1 /	Packaging	Acetone**	0.67	0.05	
18	Sawdust Handling	PM	2.3	0.9	
10	Sawdust Halldillig	PM <sub>10</sub>	0.9	0.4	
		PM	0.4	0.1	
	1	$PM_{10}$	0.4	0.1	
		$SO_2$	0.4	0.1	
19	Diesel Fire Water Pump	VOC	0.4	0.1	
		CO	1.1	0.1	
		$NO_X$	4.9	0.3	
			3.12 e-4	1.56 e-5	

<sup>\*</sup>HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.

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\*\*Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not VOCs or HAPs.

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#### **SECTION III: PERMIT HISTORY**

Air permit 814-A was issued to Correll, Inc. on June 5, 1987. This permit was the first air permit for this facility. The permit established VOC usage limits for the painting and laminating process. Allowable emission rates were also established for particulate matter and VOCs.

On August 20, 1990, Correll was issued air permit 814-AR-1. The modification included the installation of two new paint booths. The painting operation was originally installed in the 1970's and operated essentially unchanged until 1989. In 1989 a fire destroyed the two paint booths.

Air permit 814-AR-2 was issued to Correll, Inc. on April 7, 1992. This modification included the installation of a second cyclone in order to increase dust collection efficiency. No other changes were addressed in this permitting action.

On May 11, 1992, Correll, Inc. submitted an application proposing to modify air permit 814-AR-2. The facility proposed to install a touch-up spray paint booth to their existing operations. The hours of operation were also increased which caused an increase in paint and solvent usage. Air permit 814-AR-3 was issued to Correll, Inc. on July 13, 1992.

Air permit 814-AR-4 was issued to Correll, Inc. on June 21, 1993. The facility proposed to modify its existing permit to more accurately reflect actual operations at the facility and to allow for an expected increase in production over the next several years. Emissions from combustion sources were also added to the total allowable emissions.

Air permit 814-AOP-R0 was issued October 27, 1997 as the first Title V operating air permit. Four main changes have occurred at the facility. First, Correll no longer stains particle board, therefore, Roller Coater #1 (SN-08) was removed from service. VOC emissions from this source were allocated to the paint and touch-up booths. Second, the Process Equipment Coating process was eliminated. Next, a third cyclone was added to aid in sawdust collection. And finally, emissions from a small parts washer located in the maintenance shop were quantified.

Air Permit #0814-AOP-R1 was issued on February 7, 2003 as both renewal #1 and modification. Emissions from the small Parts Washer (SN-14) changed due to use of a different solvent. Touch-up painting (SN-16) with spray cans was added as a source. Two cyclones (SN-09 & SN-10) were removed and replaced with a bag filter (SN-15). New emission summary tables were submitted for SN-03, 04, and 11 due to updated paint MSDSs. Annual emissions were permitted at: 26.9 tpy PM/PM<sub>10</sub>, 0.3 tpy SO<sub>2</sub>, 244.9 tpy VOC, 0.6 tpy CO, 2.3 tpy NO<sub>X</sub>, 05 tpy Phosphoric Acid, 0.1 tpy Molybdic Acid, 0.1 tpy Copper Sulfate, 54.0 tpy Xylene, 37.0 tpy Toluene, 11.0 tpy Ethyl benzene, 1.2 tpy Hexane, 12.78 tpy Naphthalene, and 2.95 tpy Glycol Ether.

Air Permit #0814-AOP-R2 was issued on March 5, 2008 as both renewal #2 and a modification. This permit was modified to update emission rates due to changes in methodology and conversion to low VOC and low HAP raw material usage. Additionally, one cyclone (SN-13) was removed from service and sawdust handling (SN-18) was designated a new source. Annual emissions are permitted at: 1.6 tpy PM, 1.1 tpy PM<sub>10</sub>, 0.3 tpy SO<sub>2</sub>, 233.7 tpy VOC, 2.0 tpy CO, 2.4 tpy NO<sub>X</sub>, 2.19 tpy Xylene, 0.42 tpy Ethyl benzene, 1.35 tpy Cumene, and 0.71 tpy acetone.

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Air Permit #0814-AOP-R3 was issued on January 7, 2009. This modification was necessary to:

- 1. Use a cleaning solvent in the Phosphate Washer (SN-01) that shall not exceed a VOC content limit of 0.70 pounds/gallon and shall not contain any HAP. Solvent usage shall not exceed 1,980 gallons per consecutive 12 months.
- 2. Use an aerosol spray adhesive in Packaging (SN-17) that shall not exceed a VOC content limit of 4.89 pounds/gallon and an acetone content limit of 2.22 pounds/gallon. Spray adhesive usage shall not exceed 432, 12-ounce cans per consecutive 12 months.

Potential annual emission changes were: 0.8 tpy VOC and 0.04 tpy acetone.

Air Permit #0814-AOP-R4 was issued on December 16, 2011. This modification action was necessary to incorporate the following changes:

- Material content and usage modifications due to formulation changes in Touch-Up Paints, SN-16. The SN-16 paint usage decreased from 912.4 to 400 gallons per year.
- Increased emission limits and/or content limits for the Electrostatic and Touch-Up Paint Booths, SN-03, SN-04, SN-11 A/B and the Parts Washer, SN-14 to allow for operational flexibility in the event of future formula changes.
- Corrected a rounding issue in the Sawing and Routing Area, SN-15 resulting in an emission decrease.
- Corrected a rounding issue in the Packaging Area, SN-17 resulting in slight increase in the content limits for this source.

Total annual emission changes included: -0.3 tpy PM/PM<sub>10</sub>, +12.5 tpy VOC, +0.92 tpy Xylene, +0.18 tpy Ethyl benzene, +0.59 tpy Cumene, -0.2 tpy Acetone, and +0.58 tpy Glycol Ether.

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#### SECTION IV: SPECIFIC CONDITIONS

# Phosphate Washer & Drying Oven (SN-01 & 02)

#### And

# Paint Bake Oven (SN-05)

# Source Description

In preparation for painting, metal tubing and strip steel pieces (furniture legs and aprons) are cleaned in a natural gas-fired, caustic recirculation bath, the Phosphate Washer (SN-01). The cleaning solvent contains some volatile organic compounds (VOCs) and <u>no</u> hazardous air pollutants (HAPs). The cleaned wet metal parts are then dried in a natural gas-fired Drying Oven (SN-02).

Later, after the painting process is complete, the painted metal parts are dried in a natural gasfired Paint Bake Oven (SN-05).

# 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 compliance with Specific Condition #4 and Plantwide Conditions #7 and #9. [Regulation 19, §19.501 et seq., and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
	Phosphate Washer (natural gas,	PM <sub>10</sub>	0.1	0.1
	2.86 MMBtu/hr and 1,980	$SO_2$	0.1	0.1
01	,	VOC	0.9	0.8
	gallons VOC-containing solvent)	CO	0.3	1.1
		$NO_X$	0.3	1.3
	Drying Oven (natural gas, 0.82 MMBtu/hr)	PM <sub>10</sub>	0.1	0.1
		$SO_2$	0.1	0.1
02		VOC	0.1	0.1
		CO	0.1	0.3
		$NO_X$	0.1	0.4
	Paint Bake Oven (natural gas, 1.53 MMBtu/hr)	PM <sub>10</sub>	0.1	0.1
		$SO_2$	0.1	0.1
05		VOC	0.1	0.1
		CO	0.2	0.6
		$NO_X$	0.2	0.7

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2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #4. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
01	Phosphate Washer (Paint Preparation Bath) (natural gas, 2.86 MMBtu/hr)	PM	0.1	0.1
02	Drying Oven (Paint Preparation Dryer) (natural gas, 0.82 MMBtu/hr)	PM	0.1	0.1
05	Paint Bake Oven (natural gas, 1.53 MMBtu/hr)	PM	0.1	0.1

- 3. Visible emissions may not exceed 5% opacity as measured by EPA Reference Method #9 for SN-01, 02, and 05. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 4. The permittee shall use only pipeline quality natural gas as fuel for the Phosphate Washer (SN-01), the Drying Oven (SN-02) and the Paint Bake Oven (SN-05). Emissions from SN-01, 02 and 05 have been calculated at full load for continuous operation and no recordkeeping of natural gas usage is required. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

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# Electrostatic (SN-03 & SN-04)

#### And

# Touch-up (SN-11A/B) Paint Booths

# Source Description

A variety of paint is used in the three (3) paint booths. All paint is low-HAP formulation in order to comply with 40 CFR Part 63, Subpart RRRR: Surface Coating of Metal Furniture. The painting takes place in two electrostatic paint booths (SN-03 & 04) and one (1) touch-up paint booth (SN-11A/B). MSDSs provided by the facility indicated that all paints used are designated "low HAP" and the sole paint catalyst is designated "no HAP". The catalyst is an additive that aids the paint in drying quickly, especially in winter. The catalyst usage (about 20 gallons per year) is included in the annual paint usage. The Electrostatic Paint Booths (SN-03 & 04) were originally installed in the 1970's but replaced after a fire in 1989. The Touch-up Paint Booth with two stacks (SN-11A/B) is used to recoat parts which did not receive sufficient paint in the initial paint process. Dry filters control particulate overspray, not VOC emissions. Solvent is used in the paint booths as a thinner and for clean-up of equipment within the booths.

# **Specific Conditions**

5. The permittee shall not exceed the emission rates set forth in the following table. Emissions for the paint booths are based on maximum hourly application rate of 9.65 gal/hr. The maximum rate was determined in a physical test prior to 1997, which measured the true maximum spraying capacity and established permitted throughput limits. The permittee will demonstrate compliance with annual emissions of this condition by compliance with Plantwide Conditions #7 and #9. [Regulation No. 19, §19.501 and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
03, 04 & 11A/B	Three Paint Booths	VOC (PM Filters, each booth)	106	243.8

6. The permittee shall not exceed the emission rates set forth in the following table. Emissions for the paint booths are based on maximum hourly application rate of 9.65 gal/hr. The maximum rate was determined in a physical test prior to 1997, which measured the true maximum spraying capacity and established permitted throughput limits. The permittee shall demonstrate compliance with annual emissions of this condition by compliance with Plantwide Conditions #7, #8 and #9. [Regulation No. 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
		Xylene	1.34	3.07
03, 04 &	I Intag Paint Haatha L	Ethyl benzene	0.26	0.58
11A/B		Cumene	0.85	1.94
		Glycol Ether	0.26	0.58

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7. Visible emissions may not exceed 10% opacity limit as measured by EPA Reference Method 9 for SN-03, 04, and 11A/B. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311

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## Parts Washer (SN-14)

# Source Description

A small Parts Washer (SN-14) (dip tank) to clean equipment parts from the process is located in the Maintenance Shop. The cleaning solvents used in the Parts Washer are Mineral Spirits and/or straight Methyl Ethyl Ketone (MEK), both 100% VOC.

# **Specific Conditions**

8. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Conditions #7 and #9. [Regulation No. 19, §19.501 and 40 CFR Part 52, Subpart E]

	SN	Description	Pollutant	lb/hr	tpy
Ì	14	Parts Washer	VOC	0.3	0.5

9. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Conditions #7, #8 and #9. [Regulation No. 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
14 Parts Washer	Xylene	0.01	0.01	
	rans washer	Ethyl benzene	0.01	0.01

10. Visible emissions may not exceed 5% opacity limit as measured by EPA Reference Method 9 for the Parts Washer (SN-14). [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

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# Sawing and Routing (SN-15)

# Source Description

Sawdust from sawing the particleboards and routing the edges (SN-15) for assembly of the banding edge is controlled through a baghouse in conjunction with a cyclone.

# **Specific Conditions**

11. The permittee shall not exceed the emission rates set forth in the following table. [Regulation No. 19, §19.501 and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
15	Sawing and Routing	PM <sub>10</sub>	0.1	0.1

12. The permittee shall not exceed the emission rates set forth in the following table. [Regulation No. 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
15	Sawing and Routing	PM	0.1	0.1

13. Visible emissions may not exceed 5% opacity limit as measured by EPA Reference Method 9 for Sawdust and Routing (SN-15). [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

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# **Touchup Painting (SN-16)**

# Source Description

Touchup Painting (SN-16) is used to recoat parts that have a visible blemish prior to proceeding to assembly. All paint used is contained in aerosol cans, 12 ounce size. The facility has an adapter to drain any remaining material from the can into the waste paint can for appropriate disposal. All emissions are accounted for in Specific Conditions #14 and #15. After the cans are purged, the empties are thrown in the trash. Aerosol paint cans are exempt from 40 CFR Part 63, Subpart RRRR – National Emission Standards for Hazardous Air Pollutants (NESHAP): Surface Coating of Metal Furniture.

# **Specific Conditions**

14. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Conditions #7 and #9. [Regulation No. 19, §19.501 and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
16	Touchup Painting	VOC	0.7	1.5

15. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Conditions #7, #8 and #9. [Regulation No. 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
		Xylene	0.02	0.03
16	<b>Touchup Painting</b>	Ethyl benzene	0.01	0.01
	Todonap Lamening	Acetone	0.24	0.50

16. Visible emissions may not exceed 5% opacity limit as measured by EPA Reference Method 9 for touchup painting (SN-16). [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

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# Packaging (SN-17)

# Source Description

The Packaging (SN-17) process includes a manual step to reinforce the corners of the packaging through use of hot melt glue, tape, and a spray adhesive. The Aerosol Spray Adhesive generates non-point VOC and HAP emissions.

# **Specific Conditions**

17. The permittee shall not exceed the emission rates set forth in the following table. The maximum hourly emission rate is based on three cans per hour. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Conditions #7 and #9. [Regulation No. 19, §19.501 and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
17	Packaging	VOC	1.5	0.2

18. The permittee shall not exceed the emission rates set forth in the following table. The maximum hourly emission rate is based on three cans per hour. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Conditions #7, #8 and #9. [Regulation No. 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
17	Packaging	Acetone	0.67	0.05

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# Sawdust Handling (SN-18)

# Source Description

Sawdust Handling (SN-18) is non-point emissions of PM and PM<sub>10</sub> estimated for the sawdust handling and loading for shipment off-site.

# **Specific Conditions**

19. The permittee shall not exceed the emission rates set forth in the following table. [Regulation No. 19, §19.501 and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
18	Sawdust Handling	PM <sub>10</sub>	0.9	0.4

20. The permittee shall not exceed the emission rates set forth in the following table. [Regulation No. 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
18	Sawdust Handling	PM	2.3	0.9

21. Visible emissions may not exceed 20% opacity limit as measured by EPA Reference Method 9 for Sawdust Handing (SN-18). [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

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# Diesel Fire Water Pump (SN-19)

# Source Description

The diesel fire water pump is an emergency four stroke compression ignition engine installed in 1990 which is subject to NESHAP 40 CFR Part 63 Subpart ZZZZ.

# **Specific Conditions**

20. The permittee shall not exceed the emission rates set forth in the following table. [Regulation No. 19, §19.501 and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
19 Dies	Diesel Fire Water Pump	PM <sub>10</sub> SO <sub>2</sub> VOC	0.4 0.4 0.4	0.1 0.1 0.1
		CO NO <sub>X</sub>	1.1	0.1

21. The permittee shall not exceed the emission rates set forth in the following table. [Regulation No. 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
19	Diesel Fire Water Pump	PM Xylene	0.4 3.12 e-4	0.1 1.56 e-5

11. Visible emissions may not exceed 5% opacity limit as measured by EPA Reference Method 9 for SN-19. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

# **NESHAP 40 CFR Part 63 Subpart ZZZZ Conditions**

- 22. SN-19 is subject to NESHAP 40 CFR Part 63 Subpart ZZZZ and shall follow the applicable conditions listed below. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6603(a)]
- 23. 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
4. Emergency stationary CI RICE. <sup>2</sup>	500 hours of operation or annually, whichever comes first; 1	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.

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b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

<sup>&</sup>lt;sup>1</sup> 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 in this subpart.

[Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63 Subpart ZZZZ Table 2d]

- 24. The permitte shall 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:
  - a. An existing emergency or black start stationary RICE located at an area source of HAP emissions;

[Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6625(e)(3)]

- 25. The permittee shall install a non-resettable hour meter if one is not already installed. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6625(f)]
- 26. The permittee shall 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 this subpart apply. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6625(h)]
- 27. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in 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

<sup>&</sup>lt;sup>2</sup> If 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 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.

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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 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 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. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6625(i)]

- 28. The permittee shall be in compliance with the operating limitations in this subpart that apply at all times. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6605(a)]
- At all times the permittee shall 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. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6605(b)]
- 30. 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:

	Complying with the requirement to	You must demonstrate continuous
For each	•••	compliance by
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 landfill or digester gas stationary SI RICE located at an area source of HAP, existing non-emergency	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.

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4SLB and 4SRB stationary RICE ≤500 HP			
located at an area source of HAP, existing	'	ĺ	
non-emergency 4SLB and 4SRB stationary			
RICE >500 HP located at an area source of			
HAP that operate 24 hours or less per			
calendar year			

[Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63 Subpart ZZZZ Table 6]

- 31. The permittee shall report each instance in which the permittee did not meet each emission limitation or operating limitation in this subpart that apply. 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. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6640(b)]
- 32. Requirements for emergency stationary RICE.
  - a. The permittee shall operate the emergency stationary RICE according to the requirements in this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in this section, is prohibited. If you do not operate the engine according to the requirements in this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.
    - i. There is no time limit on the use of emergency stationary RICE in emergency situations.
    - ii. You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine.

      Maintenance checks and readiness testing of such units is limited to 100 hours per year. 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 year.
    - iii. You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving 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; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency

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conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

[Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6640(f)(1)(i-iii)]

- 33. The permittee shall keep the records described in this section:
  - a. Records of the occurrence and duration of each malfunction of operation ( *i.e.*, process equipment) or the air pollution control and monitoring equipment.
  - b. Records of all required maintenance performed on the air pollution control and monitoring equipment.
  - c. 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.

[Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6655(a)(2, 4-5)]

- 34. The permitte shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if the permittee owns or operates the following stationary RICE:
  - a. An existing stationary emergency RICE.

[Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6655(e)(2-3)]

35. The permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee shall 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 engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

[Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.6655(f)]

36. General Provisions (40 CFR part 63)- Table 8: Yes, except per 63.6645(a)(5), the following do not apply: 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h).

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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.	

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provisions citation	Subject of citation	Applies to subpart	Explanation
§ 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)	e)(2) Conduct of performance tests and reduction of data		Subpart ZZZZ specifies test 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		
§ 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 maniforing		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		
§ 63.8(c)(1)(i)	Routine and predictable SSM	Yes.	

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provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§ 63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	Yes.	
§ 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.

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provisions citation	Subject of citation	Applies to subpart	Explanation
§ 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.	
§ 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.	

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provisions citation	Subject of citation	Applies to subpart	Explanation
§ 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)	3.10(e)(3) Excess emission and parameter exceedances reports		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.	

[Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63 Subpart ZZZZ Table 8]

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# SECTION V: COMPLIANCE PLAN AND SCHEDULE

Correll, Inc. 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.

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# **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. [Regulation 19 §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §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. [Regulation 19 §19.410(B) and 40 CFR Part 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. [Regulation 19 §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by §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.

[Regulation 19 §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by §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. [Regulation 19 §19.303 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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7. The permittee shall not exceed the material throughput (in gallons) and VOC content limits (in pounds/gallon) at the facility per consecutive 12-month period set forth in the following table. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN(s)	Materials	Annual Throughput Limit (gallons/consecutive 12 months)	Maximum Allowable VOC Content Limit (lb/gallon)
01	Cleaning Solvent	1,980 (36 drums* @55 gal/drum)	0.70
03, 04 & 11A/B	Enamel Paints (low HAPs) & Catalyst (no HAPs)	44,237	5.44
03, 04 & 11A/B	Solvent	33,126	7.45
14	Solvent	110	7.45
16	Aerosol Spray Paints	400	7.3
17	Aerosol Spray Adhesives (432, 12 oz cans @ 7.1 lb/gal)	432, 12 oz cans = 41 gal/yr	4.9

<sup>\*</sup> Cleaning Solvent usage in SN-01 may be recorded in drums used.

8. The permittee shall not exceed the reportable HAP and acetone content limits (in pounds/gallon) at the facility. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN(s)	Material	Pollutant	HAP & Acetone Content Limits (lb/gal)
		Xylene	0.139
03, 04,	Enamel Paints	Ethyl benzene	0.026
11A/B	Enamer Fames	Cumene	0.088
		Glycol Ether	0.026
	Solvents	Xylene	0.15
		Ethyl benzene	0.15
14		Naphthalene	0.15
		Toluene	0.15
		Benzene	0.15
	Aerosol Spray Paints	Xylene	0.121
16		Ethyl benzene	0.024
		Acetone	2.487
		Toluene	0.653
17	Aerosol Spray Adhesives	Acetone	2.23

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9. The permittee shall maintain monthly records which demonstrate compliance with Plantwide Conditions #7 and #8. These records shall list chemicals by name and product number. The permittee shall maintain the Material Safety Data Sheets (MSDS) or equivalent documentation on-site. These records shall indicate the usage quantity and content in gallons of each enamel paint, spray paint, catalyst, adhesive, cleaning solvent, and mineral spirits and their respective VOC, reportable HAPs and/or acetone content (lbs/gal) used at the facility. The permittee shall maintain a twelve month rolling total and each individual month's data on-site; maintained in a spreadsheet, database, or other well-organized format; made available to Department personnel upon request; and submitted to the Department in accordance with General Provision #7. The permittee shall update the records by the fifteenth day of the month following the month to which the records pertain. [Regulation 19, §19.705 and/or Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

10. The permittee shall allow no open burning of any material at this facility. There shall not be any disposal of VOC containing scrap and/or waste by evaporation or incineration. All scrap paints and solvents are classified as hazardous waste. [Regulation #23, effective March 21, 2005, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

# **NESHAP 40 CFR Part 63 Subpart RRRR Conditions**

- 11. The permittee is subject to and shall comply with 40 CFR Part 63, Subpart RRRR National Emission Standards for Hazardous Air Pollution: Surface Coating of Metal Furniture. [Regulation 19, §19.304, 40 CFR §60.752 and 40 CFR §63.4881]
- 12. The permittee must limit organic HAP emissions to the atmosphere to no more than 0.10 kg organic HAP per liter (0.83 lb/gal) of coating solids used during each compliance period, determined according to the procedures in §63.4941, §63.4951, or §63.4961. [Regulation 19, §19.304 and §63.4890(c)]
- 13. The permittee must include all coatings, thinners, and cleaning materials used in SN-03, SN-04, and SN-11A/B when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in §63.4890. To make this determination, the permittee must demonstrate that the organic HAP content of each coating used in the coating operation or group of coating operations is less than or equal to the applicable emission rate limit in §63.4890 and that each thinner and each cleaning material used contains no organic HAP. The permittee must meet all the requirements of §63.4940, §63.4941, and §63.4942 to demonstrate compliance with the emission limit using the compliant material option. [Regulation 19, §19.304 and §63.4890(c)]
- 14. The permittee must comply with the general requirements of §63.4900 for the affected sources, paint booths SN-03, 04, and 11A/B, as follows: [Regulation 19, §19.304 and §63.4900(a-b)]
  - a. Must be in compliance at all times with the emission limitations specified in §63.4890 and

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- b. Must always operate and be maintained according to the provisions in §63.6(e)(1)(i), including all air pollution control and monitoring equipment, if any, used for purposes of complying with §63.4900.
- 15. The permittee shall comply with all General Provisions as referenced in Table 2 of §63.1 through §63.15 which apply to SN-03, 04, and 11A/B. [Regulation 19, §19.304 and §63.4901]
- The permittee must submit the following notifications in §63.7(b) and (c), §63.8(f)(4), and §63.9(b) through (e), (h), and (j) that apply by the dates specified in those sections, except as provided in §63.4910(b-c) below: [Subpart RRRR §63.7(b-c), §63.8(f)(4), §63.9(b-e),(h),(j) and §63.4910(b-c)]
  - a. The Initial Notification shall be submitted no later than 1 year after May 23, 2003.
  - b. The Notification of Compliance Status required by §63.9(h) shall be submitted no later than 30 calendar days following the end of the initial compliance period described in §63.4940, §63.4950, or §63.4960 that applies to SN-03, 04, and 11A/B.
  - c. The Notification of Compliance Status must contain the information specified in §63.4910 (c)(1) through (9) and the applicable information specified in §63.9(h).
- 17. The permittee must submit semiannual compliance reports for SN-03, SN-04, and SN-11A/B according to the requirements of §63.4920(a)(1) through (5) listed below. The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the Clean Air Act (CAA), such as those detailed in §63.4920(a)(2) and must be submitted to the Department in accordance with General Provision #7: [Subpart RRRR §63.4920(a)(1-5)]
  - a. Unless the Director has approved a different schedule for submission of reports under §63.10(a), the permittee must prepare and submit each semiannual compliance report according to the dates specified in §63.4920(a)(1)(i) through (iv).
  - b. Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in §63.4920 in the 6-month 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 semiannual compliance report pursuant to §63.4920 along with, or as part of, the 6-month monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the semiannual compliance report includes all information required by the part 70 or part 71 6-month monitoring report concerning deviations from the requirements of §63.4920 as defined in §63.4981, the submission of the semiannual compliance report shall be deemed to satisfy any obligation to report the same deviation information in the part 70 or part 71 6-month monitoring report. However, in such situations, the 6-month monitoring report must cross-reference the semiannual compliance report, and submission of a semiannual compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.

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- c. The semiannual compliance report must contain the information specified in §63.4920(a)(3)(i) through (v), and the information specified in §63.4920(a)(4) through (7) and (c)(1) that is applicable to SN-03, SN-04, and SN-11A/B.
- d. If there were no deviations from the emission limits, operating limits, and work practice standards in §63.4890, §63.4892, and §63.4893, respectively, that apply to the permittee, the semiannual compliance report must include an affirmative statement that there were no deviations from the emission limitations, operating limits, or work practice standards in §63.4890, §63.4892, and §63.4893 during the reporting period. If there were no deviations from the emission limitations in §63.4890, the semiannual compliance report must include the affirmative statement that is described in either §63.4942(c), §63.4952(c), or §63.4962(f), as applicable.
- e. If the permittee used the compliant material option, and there was a deviation from the applicable emission limit in §63.4890, the semiannual compliance report must contain the information in paragraphs §63.4920(a)(5)(i) through (iv).
- 18. The permittee must collect and keep records of the data and information specified in §63.4930 as listed below. Failure to collect and keep these records is a deviation from the applicable standard. [Subpart RRRR §63.4930]
  - a. A copy of each notification and report submitted to comply with §63.4930, and the documentation supporting each notification and report.
  - b. A current copy of information provided by materials suppliers or manufacturers. This would include information such as manufacturer's formulation data for the materials used, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner, and cleaning material and the volume fraction of coating solids for each coating. If testing was conducted to determine mass fraction of organic HAP, density, or volume fraction of coating solids, the permittee must keep a copy of the complete test report. If information provided to the permittee by the manufacturer or supplier of the material that was based on testing was used, the permittee must keep the summary sheet of results provided by the manufacturer or supplier. The permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier.
  - c. For each compliance period, the records specified in §63.4930(c)(1) through (4).
  - d. A record of the name and volume of each coating, thinner, and cleaning material used during each compliance period.
  - e. A record of the mass fraction of organic HAP for each coating, thinner, and cleaning material used during each compliance period.
  - f. A record of the volume fraction of coating solids for each coating used during each compliance period.
  - g. If a determination of density is required by the compliance option used to demonstrate compliance with the emission limit, a record of the density for each coating used during each compliance period; and, if either the emission rate without add-on controls or the emission rate with add-on controls compliance option was used, the density for each thinner and cleaning material used during each compliance period.

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h. If the permittee used an allowance in Equation 1 of §63.4951 for organic HAP contained in waste materials sent to or designated for shipment to a TSDF according to §63.4951(e)(4), the permittee must keep records of the information specified in §63.4930(h)(1) through (3).

- i. The permittee must keep records of the date, time, and duration of each deviation.
- 19. The permittee shall meet the recordkeeping requirements of §63.4931(a) through (c) as specified below:
  - a. The records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database.
  - b. As specified in §63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
  - c. The permittee must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You may keep these records off-site for the remaining 3 years. Records must be kept on-site pertaining to the design and manufacturer's specifications for operation of add-on con trol equipment for the life of the equipment. [§19.304 of Regulation 19 and §63.4931(a-c)]
- 20. The permittee shall meet the compliance requirements as specified in §63.4940 through §63.4942. [Regulation 19, §19.304 and §63.4940 through §63.4942]

# **Title VI Provisions**

- 21. The permittee must comply with the standards for labeling of products using ozone-depleting substances. [40 CFR Part 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.
- 22. The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 CFR Part 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.

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- 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 sma ll 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.
- 23. 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 CFR Part 82, Subpart A, Production and Consumption Controls.
- 24. 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 CFR part 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.
- 25. The permittee can switch from any ozone depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G.

#### **Permit Shield**

26. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in the following table of this condition. The permit specifically identifies the following as applicable requirements based upon the information submitted by the permittee in an application dated August 7, 2007 and October 3, 2012.

# Applicable Regulations

Source No.	Regulation	Description
Facility	Regulation 19	Regulation of the Arkansas Plan of Implementation for Air Control, effective October 15, 2007
Facility	Regulation 26	Regulations of the Arkansas Air Operating Air Permit Program, effective September 26, 2002
03, 04, & 11A/B	40 CFR Part 63, Subpart RRRR	National Emission Standards for Hazardous Air Pollutants for Surface Coating of Metal Furniture

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Source No.	Regulation	Description
19	40 CFR Part 63 Subpart ZZZZ	National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

The permit specifically identifies the following as inapplicable based upon information submitted by the permittee in an application dated August 7, 2007 and October 3, 2012.

# Inapplicable Regulations

Source No.	Regulation	Description
Facility	40 CFR 52.21	Prevention of Significant Deterioration (PSD) of Air Quality
03 & 04, & 11A/B	40 CFR Part 60, Subpart EE	NSPS: Metal Furniture Surface Coating
Facility	40 CFR Part 63.80, Subpart JJ	NESHAP: National Emission Standards for Wood Furniture Manufacturing Operations
19	40 CFR Part 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

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# **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 §26.304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated July 24, 2008 and October 3, 2012.

Description	Category
Welding Operations	A-7
Heat & Pressure Lamination of Pre-Glued Laminates (formerly SN-07)	A-13
Stencil Ink (Labeling of Packaging Materials)	A-13

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#### 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 (A.C.A. §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 (A.C.A. §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 (A.C.A. §8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute. [40 CFR 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 CFR 70.6(a)(2) and Regulation 26 §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. [Regulation 26 §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 CFR 70.6(a)(1)(ii) and Regulation 26 §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 CFR 70.6(a)(3)(ii)(A) and Regulation 26 §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 CFR 70.6(a)(3)(ii)(B) and Regulation 26 §26.701(C)(2)(b)]

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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 Regulation No. 26, §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 CFR 70.6(a)(3)(iii)(A) and Regulation 26 §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 Regulation19, § 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 average 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.

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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.

[Regulation 19 §19.601 and §19.602, Regulation 26 §26.701(C)(3)(b), and 40 CFR 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 CFR 70.6(a)(5), Regulation 26 §26.701(E), and A.C.A. §8-4-203 as referenced by §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 CFR 70.6(a)(6)(i) and Regulation 26 §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 CFR 70.6(a)(6)(ii) and Regulation 26 §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 CFR 70.6(a)(6)(iii) and Regulation 26 §26.701(F)(3)]
- 13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26 §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 CFR 70.6(a)(6)(v) and Regulation 26 §26.701(F)(5)]
- 15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 26 §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

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changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26 §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 CFR 70.6(a)(9)(i) and Regulation 26 §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 CFR 70.6(b) and Regulation 26 §26.702(A) and (B)]
- 19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26 §26.703(A)]
- 20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26 §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 CFR 70.6(c)(5) and Regulation 26 §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;

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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: [Regulation 26 §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. [A.C.A. §8-4-203 as referenced by §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.

[Regulation 18 §18.314(A), Regulation 19 §19.416(A), Regulation 26 §26.1013(A), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 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

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f. The permittee maintains records of the dates and results of such temporary emissions/testing.

[Regulation 18 §18.314(B), Regulation 19 §19.416(B), Regulation 26 §26.1013(B), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart El

- 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.

[Regulation 18 §18.314(C), Regulation 19 §19.416(C), Regulation 26 §26.1013(C), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

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Appendix A:
NESHAP 40 CFR Part 63 Subpart RRRR

# ELECTRONIC CODE OF FEDERAL REGULATIONS

# e-CFR Data is current as of October 25, 2012

Title 40: Protection of Environment PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (CONTINUED)

# Subpart RRRR—National Emission Standards for Hazardous Air Pollutant **Surface Coating of Metal Furniture**

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Source: 68 FR 28619, May 23, 2003, unless otherwise noted.

#### What This Subpart Covers

#### § 63.4880 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for metal furniture surface coating facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

#### § 63.4881 Am I subject to this subpart?

- (a) Except as provided in paragraph (c) of this section, the source category to which this subparapplies is surface coating of metal furniture.
- (1) Surface coating is the application of coatings to a substrate using, for example, spray guns o dip tanks.
- (2) Metal furniture means furniture or components of furniture constructed either entirely or partifrom metal. Metal furniture includes, but is not limited to, components of the following types of productions.

as well as the products themselves: household, office, institutional, laboratory, hospital, public building, restaurant, barber and beauty shop, and dental furniture; office and store fixtures; partitions shelving; lockers; lamps and lighting fixtures; and wastebaskets.

- (b) You are subject to this subpart if you own or operate a new, reconstructed, or existing affects source as defined in § 63.4882, in the source category defined in paragraph (a) of this section, and t is a major source, is located at a major source, or is part of a major source of emissions of hazardou air pollutants (HAP). A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential them the emit any single HAP at a rate of 9.07 megagrams (Mg) (10 tons) or more per year or any combination HAP at a rate of 22.68 Mg (25 tons) or more per year.
- (c) This subpart does not apply to surface coating that meets any of the criteria of paragraphs (c through (6) of this section.
- (1) Surface coating conducted at an affected source that uses only coatings, thinners, and clear materials that contain no organic HAP.
- (2) Surface coating of metal components of wood furniture conducted in an operation that is sub to the wood furniture manufacturing NESHAP in subpart JJ of this part.
- (3) Surface coating that occurs at research or laboratory facilities or that is part of janitorial, building, and facility maintenance operations.
- (4) Surface coating of only small items such as knobs, hinges, or screws that have a wider use beyond metal furniture are not subject to this subpart unless the surface coating occurs at an affecte metal furniture source.
- (5) Surface coating of metal furniture conducted for the purpose of repairing or maintaining meta furniture used by a major source and not for commerce is not subject to this subpart, unless organic HAP emissions from the surface coating itself are as high as the rates specified in paragraph (b) of the section.
- (6) Surface coating of metal furniture performed on-site at installations owned or operated by the Armed Forces of the United States (including the Coast Guard and the National Guard of any State).

## § 63.4882 What parts of my plant does this subpart cover?

- (a) This subpart applies to each new, reconstructed, and existing affected source.
- (b) The affected source is the collection of all of the items listed in paragraphs (b)(1) through (4) this section that are used for surface coating of metal furniture:
  - (1) All coating operations as defined in § 63.4981;
- (2) All storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed;
  - (3) All manual and automated equipment and containers and all pumps and piping within the

affected source used for conveying coatings, thinners, and cleaning materials; and

- (4) All storage containers, all pumps and piping, and all manual and automated equipment and containers within the affected source used for conveying waste materials generated by a coating operation.
- (c) An affected source is a new affected source if you commenced its construction after April 24, 2002, and the construction is of a completely new metal furniture surface coating facility where previously no metal furniture surface coating facility had existed.
  - (d) An affected source is reconstructed if you meet the criteria as defined in § 63.2.
  - (e) An affected source is existing if it is not new or reconstructed.

### § 63.4883 When do I have to comply with this subpart?

The date by which you must comply with this subpart is called the compliance date. The compliance date for each type of affected source is specified in paragraphs (a) through (c) of this section. The compliance date begins the initial compliance period during which you conduct the initial compliance demonstration described in §§ 63.4940, 63.4950, and 63.4960.

- (a) For a new or reconstructed affected source, the compliance date is the applicable date in paragraph (a)(1) or (2) of this section:
- (1) If the initial startup of your new or reconstructed affected source is before May 23, 2003, the compliance date is May 23, 2003.
- (2) If the initial startup of your new or reconstructed affected source occurs after May 23, 2003, t compliance date is the date of initial startup of your affected source.
  - (b) For an existing affected source, the compliance date is the date 3 years after May 23, 2003.
- (c) For an area source that increases its emissions or its potential to emit such that it becomes  $\varepsilon$  major source of HAP emissions, the compliance date is specified in paragraphs (c)(1) and (2) of this section.
- (1) For any portion of the source that becomes a new or reconstructed affected source subject to this subpart, the compliance date is the date of initial startup of the affected source or May 23, 2003, whichever is later.
- (2) For any portion of the source that becomes an existing affected source subject to this subparthe compliance date is the date 1 year after the area source becomes a major source or 3 years after May 23, 2003, whichever is later.
- (d) You must meet the notification requirements in § 63.4910 according to the dates specified in that section and in subpart A of this part. Some of the notifications must be submitted before the compliance dates described in paragraphs (a) through (c) of this section.

#### **Emission Limitations**

### § 63.4890 What emission limits must I meet?

- (a) For a new or reconstructed affected source, you must emit no organic HAP during each compliance period, determined according to the procedures in § 63.4941.
- (b) Alternative emission limit. You may request approval from the Administrator to use an alternative new source emission limit for specific metal furniture components or type of components which you believe the emission limit in paragraph (a) of this section cannot be achieved.
- (1) Any request to use an alternative emission limit under paragraph (b) of this section must con specific information demonstrating why no organic HAP-free coating technology can be used on the metal furniture components. The request must be based on objective criteria related to the performal or appearance requirements of the finished coating, which may include but is not limited to the criteri listed in paragraphs (b)(1)(i) through (viii) of this section.
  - (i) Low dried film thickness requirements (e.g., less than 0.0254 millimeters (0.001 inch)).
  - (ii) Flexibility requirements for parts subject to repeated bending.
  - (iii) Chemical resistance to withstand chemical exposure in environments such as laboratories.
  - (iv) Resistance to the effects of exposure to ultraviolet light.
  - (v) Adhesion characteristics related to the condition of the substrate.
  - (vi) High gloss requirements.
  - (vii) Custom colors such as matching the color of a corporate logo.
- (viii) Non-uniform surface finishes such as an antique appearance that requires visible cracking the dried film.
- (2) If the request to use an alternative emission limit under paragraph (b) of this section is approved, the new source must meet an emission limit of 0.094 kilogram (kg) organic HAP per liter (kg/liter) (0.78 pounds per gallon (lb/gal)) coating solids used for only those components subject to the approval. All other metal furniture surface coating operations at the new source must meet the emiss limit specified in paragraph (a) of this section. Until approval to use the alternative emission limit has been granted by the Administrator under this paragraph (b)(2), you must meet the emission limit specified in paragraph (a) of this section and all other applicable requirements in this subpart.
- (c) For an existing affected source, you must limit organic HAP emissions to the atmosphere to 1 more than 0.10 kg organic HAP per liter (0.83 lb/gal) of coating solids used during each compliance period, determined according to the procedures in § 63.4941, § 63.4951, or § 63.4961.

#### § 63.4891 What are my options for demonstrating compliance with the emission limits?

You must include all coatings, thinners, and cleaning materials used in the affected source wher determining whether the organic HAP emission rate is equal to or less than the applicable emission I

in § 63.4890. To make this determination, you must use at least one of the three compliance options listed in paragraphs (a) through (c) of this section. You may apply any of the compliance opti to an individual coating operation or to multiple coating operations as a group or to the entire affected source. You may use different compliance options for different coating operations or at different time on the same coating operation. However, you may not use different compliance options at the same time on the same coating operation. If you switch between compliance options for any coating operator group of coating operations, you must document this switch as required by § 63.4930(c), and you must report it in the next semiannual (6-month period) compliance report required in § 63.4920.

- (a) Compliant material option. Demonstrate that the organic HAP content of each coating used i the coating operation or group of coating operations is less than or equal to the applicable emission I limit in § 63.4890 and that each thinner and each cleaning material used contains no organic HAP. Y must meet all the requirements of §§ 63.4940, 63.4941, and 63.4942 to demonstrate compliance wit the emission limit using this option.
- (b) *Emission rate without add-on controls option.* Demonstrate that, based on the coatings, thinners, and cleaning materials used in the coating operation or group of coating operations, the organic HAP emission rate for the coating operation or group of coating operations is less than or eq to the applicable emission rate limit in § 63.4890, calculated as a monthly emission rate. You must m all the requirements of §§ 63.4950, 63.4951, and 63.4952 to demonstrate compliance with the emiss rate limit using this option.
- (c) Emission rate with add-on controls option. Demonstrate that, based on the coatings, thinners and cleaning materials used in the coating operation or group of coating operations, and the emissio reductions achieved by emission capture and add-on control systems, the organic HAP emission rateless than or equal to the applicable emission rate limit in § 63.4890, calculated as a monthly emissio rate. If you use this compliance option, you must also demonstrate that all capture systems and add-control devices for the coating operation or group of coating operations meet the operating limits required in § 63.4892, except for solvent recovery systems for which you conduct liquid-liquid materibalances according to § 63.4961(j); and that you meet the work practice standards required in § 63.4893. You must meet all the requirements of §§ 63.4960 through 63.4967 to demonstrate compliance with the emission limits, operating limits, and work practice standards using this option.
- (d) If you choose to use the emission rate with add-on controls compliance option in paragraph ( of this section and operate the coating operation, its emission capture system, or its add-on control device at multiple sets of representative operating conditions that result in different capture system o add-on control device efficiencies during a compliance period, you must follow one of the procedures paragraph (d)(1) or (2) of this section.
- (1) Determine the operating conditions that result in the lowest emission capture system and adon control device efficiencies through performance testing conducted according to §§ 63.4963, 63.4§ and 63.4965. Use these emission capture system and add-on control device efficiencies for all representative operating conditions during the compliance period.
- (2) Develop a compliance calculation procedure for determining the organic HAP emission rated the compliance period that takes into account all of the representative operating conditions the source was operated under during the compliance period and submit the procedure to the Administrator for approval. Until you receive approval from the Administrator, you must determine compliance according to paragraph (c) of this section.

### § 63.4892 What operating limits must I meet?

- (a) For any coating operation or group of coating operations for which you use the compliant material option or the emission rate without add-on controls option to demonstrate compliance, you a not required to meet any operating limits.
- (b) For any coating operation or group of coating operations for which you use the emission rate with add-on controls option to demonstrate compliance, except those for which you use a solvent recovery system and conduct a liquid-liquid material balance according to § 63.4961(j), you must me the operating limits specified in Table 1 to this subpart. These operating limits apply to the emission capture and control systems on the coating operation or group of coating operations for which you use emission capture and add-on controls to demonstrate compliance. You must establish the operating limits during the performance test according to the requirements in § 63.4966. You must meet the operating limits at all times after you establish them.
- (c) If you use an add-on control device other than those listed in Table 1 to this subpart, or wish monitor an alternative parameter and comply with a different operating limit, you must apply to the Administrator for approval of alternative monitoring under § 63.8(f).

## § 63.4893 What work practice standards must I meet?

- (a) For any coating operation or group of coating operations for which you use the compliant material option or the emission rate without add-on controls option to demonstrate compliance, you a not required to meet any work practice standards.
- (b) For any coating operation or group of coating operations for which you use the emission rate with add-on controls option to demonstrate compliance, you must develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coating thinners, and cleaning materials used in, and waste materials generated by, the coating operation or group of coating operations for which you use this option; or you must meet an alternative standard a provided in paragraph (c) of this section. The plan must specify practices and procedures to ensure that, at a minimum, the elements specified in paragraphs (b)(1) through (5) of this section are implemented.
- (1) All organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must stored in closed containers. You must ensure that these containers are kept closed at all times except when depositing or removing these materials from the container.
- (2) Spills of organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be minimized.
- (3) Organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.
- (4) Mixing vessels which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.
- (5) Emissions of organic HAP must be minimized during cleaning of storage, mixing, and convey equipment.

(c) As provided in § 63.6(g), the Administrator may choose to grant you permission to use an alternative to the work practice standards in this section.

### **General Compliance Requirements**

### § 63.4900 What are my general requirements for complying with this subpart?

- (a) The affected source must be in compliance at all times with the emission limitations specified § 63.4890.
- (b) You must always operate and maintain your affected source, including all air pollution contro and monitoring equipment you use for purposes of complying with this subpart, according to the provisions in § 63.6(e)(1)(i).
- (c) If your affected source uses an emission capture system and add-on control device to compl with the emission limitations in § 63.4890, you must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in § 63.6(e)(3). The SSMP must address the startup, shutdown, and corrective actions in the event of a malfunction of the emission capture syste or the add-on control device. The SSMP must also address any coating operation equipment that make cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures.

[68 FR 28619, May 23, 2003, as amended at 71 FR 20466, Apr. 20, 2006]

# § 63.4901 What parts of the General Provisions apply to me?

Table 2 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 ap to you.

#### Notifications, Reports, and Records

#### § 63.4910 What notifications must I submit?

- (a) General. You must submit the notifications in §§ 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through, (h), and (j) that apply to you by the dates specified in those sections, except as provided in paragraphs (b) and (c) of this section.
- (b) Initial Notification. You must submit the Initial Notification required by § 63.9(b) for a new or reconstructed affected source no later than 120 days after initial startup or 120 days after May 23, 20 whichever is later. For an existing affected source, you must submit the Initial Notification no later that 1 year after May 23, 2003.
- (c) Notification of Compliance Status. You must submit the Notification of Compliance Status required by § 63.9(h) no later than 30 calendar days following the end of the initial compliance period described in § 63.4940, § 63.4950, or § 63.4960 that applies to your affected source. The Notification Compliance Status must contain the information specified in paragraphs (c)(1) through (9) of this section and the applicable information specified in § 63.9(h).
  - (1) Company name and address.

- (2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the report. Such certifications must also comply with the requirements of 40 CFR 70.5(d) or 40 CFR 71.5(d).
- (3) Date of the report and beginning and ending dates of the reporting period. The reporting peri is the initial compliance period described in § 63.4940, § 63.4950, or § 63.4960 that applies to your affected source.
- (4) Identification of the compliance option or options specified in § 63.4891 that you used on eac coating operation in the affected source during the initial compliance period and that you will use for demonstrating continuous compliance.
- (5) Statement of whether or not the affected source achieved the emission limitations for the initi compliance period.
  - (6) If you had a deviation, include the information in paragraphs (c)(6)(i) and (ii) of this section.
  - (i) A description and statement of the cause of the deviation.
- (ii) If you failed to meet the applicable emission limit in § 63.4890, include all the calculations you used to determine compliance. You do not need to submit information provided by material suppliers manufacturers or test reports.
- (7) For each of the data items listed in paragraphs (c)(7)(i) through (iv) of this section that is required by the compliance option(s) you used to demonstrate compliance with the emission limit, include an example of how you determined the value, including calculations and supporting data. Supporting data can include a copy of the information provided by the supplier or manufacturer of the example coating or material or a summary of the results of testing conducted according to § 63.4941 (b), or (c). You do not need to submit copies of any test reports.
  - (i) Mass fraction of organic HAP for one coating, for one thinner, and for one cleaning material.
  - (ii) Volume fraction of coating solids for one coating.
- (iii) Density for one coating, one thinner, and one cleaning material, except that if you use the compliant material option, only the example coating density is required.
- (iv) The amount of waste materials and the mass of organic HAP contained in the waste materials for which you are claiming an allowance in Equation 1 of § 63.4951.
- (8) The calculation of the organic HAP emission rate for the compliance option(s) you used, as specified in paragraphs (c)(8)(i) through (iii) of this section.
- (i) For the compliant materials option, provide an example calculation of the organic HAP conter for one coating, using Equation 2 of § 63.4941.
- (ii) For the emission rate without add-on controls option, provide the information specified in paragraphs (c)(8)(ii)(A) through (C) of this section.

- (A) The calculation of the total mass of organic HAP emissions during the initial compliance peri using Equation 1 of § 63.4951.
- (B) The calculation of the total volume of coating solids used during the initial compliance period using Equation 2 of § 63.4951.
- (C) The calculation of the organic HAP emission rate for the initial compliance period, using Equation 3 of § 63.4951.
- (iii) For the emission rate with add-on controls option, provide the information specified in paragraphs (c)(8)(iii)(A) through (D) of this section.
- (A) The calculation of the total mass of organic HAP emissions for the coatings, thinners, and cleaning materials used during the initial compliance period, using Equation 1 of § 63.4951.
- (B) The calculation of the total volume of coating solids used during the initial compliance period using Equation 2 of § 63.4951.
- (C) The calculation of the mass of organic HAP emission reduction during the initial compliance period by emission capture systems and add-on control devices, using Equation 1 of § 63.4961, and calculation of the mass of organic HAP emission reduction for the coating operations controlled by solvent recovery systems during each compliance period, using Equation 3 of § 63.4961 as applicab
- (D) The calculation of the organic HAP emission rate for the initial compliance period, using Equation 4 of § 63.4961.
- (9) For the emission rate with add-on controls option, you must include the information specified paragraphs (c)(9)(i) through (v) of this section. However, the requirements in paragraphs (c)(9)(i) through (iii) of this section do not apply to solvent recovery systems for which you conduct liquid-liqu material balances according to § 63.4961(j).
- (i) For each emission capture system, a summary of the data and copies of the calculations supporting the determination that the emission capture system is a permanent total enclosure (PTE) a measurement of the emission capture system efficiency. Include a description of the protocol follow for measuring capture efficiency, summaries of any capture efficiency tests conducted, and any calculations supporting the capture efficiency determination. If you use the data quality objective (DC or lower confidence limit (LCL) approach, you must also include the statistical calculations to show y meet the DQO or LCL criteria in appendix A to subpart KK of this part. You do not need to submit complete test reports.
- (ii) A summary of the results of each add-on control device performance test. You do not need to submit complete test reports.
- (iii) A list of each emission capture system's and add-on control device's operating limits and a summary of the data used to calculate those limits.
- (iv) A statement of whether or not you developed and implemented the work practice plan requir by § 63.4893.

(v) A statement of whether or not you developed and implemented the SSMP required by § 63.4900.

# § 63.4920 What reports must I submit?

- (a) Semiannual compliance reports. You must submit semiannual compliance reports for each affected source according to the requirements of paragraphs (a)(1) through (7) of this section. The semiannual compliance reporting requirements may be satisfied by reports required under other part of the Clean Air Act (CAA), such as those detailed in paragraph (a)(2) of this section.
- (1) Dates. Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must prepare and submit each semiannual compliance report according to the dates specified in paragraphs (a)(1)(i) through (iv) of this section.
- (i) The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period described in § 63.4940, § 63.4950, or § 63.4960 that applies to your affected source and ends on June 30 or December 31, whichever occ first following the end of the initial compliance period.
- (ii) Each subsequent semiannual compliance report must cover the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
- (iii) Each semiannual compliance report must be postmarked or delivered no later than July 31 c January 31, whichever date is the first date following the end of the semiannual reporting period.
- (iv) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 40 CFR part 71, and if the permitting authority has established dates for submitting 6-month monitori 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 an subsequent semiannual compliance reports according to the dates the permitting authority has established for the 40 CFR part 70 or 40 CFR part 71 6-month monitoring reports instead of according to the dates specified in paragraph (a)(1)(iii) of this section. However, under no circumstances shall the semiannual compliance report be submitted more than 30 days after the end of the semiannual reporting period established in paragraphs (a)(1)(i) and (ii) of this section.
- (2) Inclusion with title V report. Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in 6-month 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 semiannual compliance report pursuant to this section along with, or as part of, the 6-month monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), a the semiannual compliance report includes all information required by the part 70 or part 71 6-month monitoring report concerning deviations from the requirements of this subpart as defined in § 63.498 the submission of the semiannual compliance report shall be deemed to satisfy any obligation to report same deviation information in the part 70 or part 71 6-month monitoring report. However, in such situations, the 6-month monitoring report must cross-reference the semiannual compliance report, are submission of a semiannual compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.
- (3) General requirements. The semiannual compliance report must contain the information specified in paragraphs (a)(3)(i) through (v) of this section, and the information specified in paragrapl

- (a)(4) through (7) and (c)(1) of this section that is applicable to your affected source.
- (i) Company name and address.
- (ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the report. Such certifications must also comply with the requirements of 40 CFR 70.5(d) or 40 CFR 71.5(d)
- (iii) Date of report and beginning and ending dates of the reporting period. The reporting period i the 6-month period ending on June 30 or December 31.
- (iv) Identification of the compliance option or options specified in § 63.4891 that you used on eacoating operation during the reporting period. If you switched between compliance options during the reporting period, you must report the beginning and ending dates you used each option.
- (v) If you used the emission rate without add-on controls or the emission rate with add-on controls or the emission rate for each compliance period ending in the 6-month reporting period.
- (4) No deviations. If there were no deviations from the emission limits, operating limits, and work practice standards in §§ 63.4890, 63.4892, and 63.4893, respectively, that apply to you, the semianr compliance report must include an affirmative statement that there were no deviations from the emission limitations, operating limits, or work practice standards in §§ 63.4890, 63.4892, and 63.489 during the reporting period. If there were no deviations from the emission limitations in § 63.4890, the semiannual compliance report must include the affirmative statement that is described in either § 63.4942(c), § 63.4952(c), or § 63.4962(f), as applicable. If you used the emission rate with add-on controls option and there were no periods during which the continuous parameter monitoring system (CPMS) were out-of-control as specified in § 63.8(c)(7), the semiannual compliance report must include statement that there were no periods during which the CPMS were out-of-control during the reporting period as specified in § 63.8(c)(7).
- (5) Deviations: compliant material option. If you used the compliant material option, and there was a deviation from the applicable emission limit in § 63.4890, the semiannual compliance report must contain the information in paragraphs (a)(5)(i) through (iv) of this section.
- (i) Identification of each coating used that deviated from the emission limit, and of each thinner a cleaning material used that contained organic HAP, and the dates and time periods each was used.
- (ii) The calculation of the organic HAP content for each coating identified in paragraph (a)(5)(i) o this section, using Equation 2 of § 63.4941. You do not need to submit background data supporting t calculation, for example, information provided by materials suppliers or manufacturers, or test reports
- (iii) The determination of mass fraction of organic HAP for each coating, thinner, and cleaning material identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation, for example, information provided by materials suppliers or manufacturer or test reports.
  - (iv) A statement of the cause of each deviation.
  - (6) Deviations: emission rate without add-on controls option. If you used the emission rate without

add-on controls option, and there was a deviation from any applicable emission limit in § 63.489 the semiannual compliance report must contain the information in paragraphs (a)(6)(i) through (v) of section. You do not need to submit background data supporting these calculations, for example, information provided by materials suppliers or manufacturers, or test reports.

- (i) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the applicable emission limit in § 63.4890.
- (ii) The calculation of the total mass of organic HAP emissions for each month, using Equations of § 63.4951.
- (iii) The calculation of the total volume of coating solids used each month, using Equation 2 of § 63.4951.
- (iv) The calculation of the organic HAP emission rate for each month, using Equation 3 of § 63.4951.
  - (v) A statement of the cause of each deviation.
- (7) Deviations: emission rate with add-on controls option. If you used the emission rate with add controls option, and there was a deviation from any applicable emission limitation (including any peri when emissions bypassed the add-on control device and were diverted to the atmosphere), the semiannual compliance report must contain the information in paragraphs (a)(7)(i) through (xvii) of the section. This includes periods of startup, shutdown, and malfunction during which deviations occurre You do not need to submit background data supporting these calculations, for example, information provided by materials suppliers or manufacturers, or test reports.
- (i) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the applicable emission limit in § 63.4890.
- (ii) The calculation of the total mass of organic HAP emissions for the coatings, thinners, and cleaning materials used during each month, using Equation 1 of § 63.4951 and, if applicable, the calculation used to determine the total mass of organic HAP in waste materials sent or designated fc shipment to a hazardous waste treatment, storage, and disposal facility (TSDF) for treatment or disposal during each compliance period, according to § 63.4951(e)(4).
  - (iii) The calculation of the total volume of coating solids used, using Equation 2 of § 63.4951.
- (iv) The calculation of the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices, using Equation 1 of § 63.4961, and Equation 3 of § 63.4961 for the calculation of the mass of organic HAP emission reduction for the coating operation controlled by solvent recovery systems each compliance period, as applicable.
- (v) The calculation of the organic HAP emission rate for each compliance period, using Equation of § 63.4961.
  - (vi) The date and time that each malfunction started and stopped.
  - (vii) A brief description of the CPMS.

- (viii) The date of the latest CPMS certification or audit.
- (ix) The date and time that each CPMS was inoperative, except for zero (low-level) and high-lev checks.
- (x) The date, time, and duration that each CPMS was out-of-control, including the information in § 63.8(c)(8).
- (xi) The date and time period of each deviation from an operating limit in Table 1 to this subpart; date and time period of any bypass of the add-on control device; and whether each deviation occurre during a period of startup, shutdown, or malfunction or during another period.
- (xii) A summary of the total duration of each deviation from an operating limit in Table 1 to this subpart and each bypass of the add-on control device during the semiannual reporting period and th total duration as a percent of the total affected source operating time during that semiannual reportin period.
- (xiii) A breakdown of the total duration of the deviations from the operating limits in Table 1 to th subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
- (xiv) A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total affected source operating time dur that semiannual reporting period.
- (xv) A description of any changes in the CPMS, coating operation, emission capture system, or add-on control device since the last semiannual reporting period.
- (xvi) For each deviation from the work practice standards, a description of the deviation; the date and time period of the deviation; and the actions you took to correct the deviation.
  - (xvii) A statement of the cause of each deviation.
- (b) Performance test reports. If you use the emission rate with add-on controls option, you must submit reports of performance test results for emission capture systems and add-on control devices later than 60 days after completing the tests as specified in § 63.10(d)(2).
- (c) Startup, shutdown, and malfunction reports. If you used the emission rate with add-on contro option and you had a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified in paragraphs (c)(1) and (2) of this section.
- (1) If your actions were consistent with your SSMP, you must include the information specified ir § 63.10(d)(5) in the semiannual compliance report required by paragraph (a) of this section.
- (2) If your actions were not consistent with your SSMP, you must submit an immediate startup, shutdown, and malfunction report as described in paragraphs (c)(2)(i) and (ii) of this section.
  - (i) You must describe the actions taken during the event in a report delivered by facsimile.

telephone, or other means to the Administrator within 2 working days after starting actions that  $\varepsilon$  inconsistent with the plan.

(ii) You must submit a letter to the Administrator within 7 working days after the end of the event unless you have made alternative arrangements with the Administrator as specified in § 63.10(d)(5)( The letter must contain the information specified in § 63.10(d)(5)(ii).

### § 63.4930 What records must I keep?

You must collect and keep records of the data and information specified in this section. Failure t collect and keep these records is a deviation from the applicable standard.

- (a) A copy of each notification and report that you submitted to comply with this subpart, and the documentation supporting each notification and report.
- (b) A current copy of information provided by materials suppliers or manufacturers. This would include records pertaining to the design and manufacturer's specifications for the life of the add-on control equipment. It would also include information such as manufacturer's formulation data for the materials used, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner, and cleaning material and the volume fraction of coating solids for each coating. If y conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, you must keep a copy of the complete test report. If you use information provided to you by the manufacturer or supplier of the material that was based on testing, you must keep the summary sheef of results provided to you by the manufacturer or supplier. You are not required to obtain the test report other supporting documentation from the manufacturer or supplier.
- (c) For each compliance period, the records specified in paragraphs (c)(1) through (4) of this section.
- (1) A record of the coating operations at which you used each compliance option and the time periods (beginning and ending dates and times) you used each option.
- (2) For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 2 of § 63.4941.
- (3) For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners, and cleaning materials used during each compliance period, using Equation 1 of § 63.4951 and, if applicable, the calculation used to determine the total mass of organic HAP in waste materials sent or designated for shipment to a hazardous wa TSDF for treatment or disposal during each compliance period, according to § 63.4951(e)(4); the calculation of the total volume of coating solids used during each compliance period, using Equation of § 63.4951; and the calculation of the organic HAP emission rate for each compliance period, using Equation 3 of § 63.4951.
- (4) For the emission rate with add-on controls option, records of the calculations specified in paragraphs (c)(4)(i) through (iv) of this section.
- (i) The calculation of the total mass of organic HAP emissions for the coatings, thinners, and cleaning materials used during each compliance period, using Equation 1 of § 63.4951 and, if applicable, the calculation used to determine the total mass of organic HAP in waste materials sent c

designated for shipment to a hazardous waste TSDF for treatment or disposal during each compliance period, according to § 63.4951(e)(4);

- (ii) The calculation of the total volume of coating solids used during each compliance period, usi Equation 2 of § 63.4951;
- (iii) The calculation of the mass of organic HAP emission reduction by emission capture systems and add-on control devices, using Equation 1 of § 63.4961, and the calculation of the mass of organi HAP emission reduction for the coating operation controlled by a solvent recovery system during the compliance period, using Equation 3 of § 63.4961, as applicable;
- (iv) The calculation of the organic HAP emission rate for each compliance period, using Equatio of § 63.4961.
- (d) A record of the name and volume of each coating, thinner, and cleaning material used during each compliance period.
- (e) A record of the mass fraction of organic HAP for each coating, thinner, and cleaning material used during each compliance period.
- (f) A record of the volume fraction of coating solids for each coating used during each compliant period.
- (g) If a determination of density is required by the compliance option(s) you used to demonstrate compliance with the emission limit, a record of the density for each coating used during each compliance period; and, if you use either the emission rate without add-on controls or the emission rate with add-on controls compliance option, the density for each thinner and cleaning material used durit each compliance period.
- (h) If you use an allowance in Equation 1 of § 63.4951 for organic HAP contained in waste materials sent to or designated for shipment to a TSDF according to § 63.4951(e)(4), you must keep records of the information specified in paragraphs (h)(1) through (3) of this section.
- (1) The name and address of each TSDF to which you sent waste materials for which you use a allowance in Equation 1 of § 63.4951, a statement of which subparts under 40 CFR parts 262, 264, 265, and 266 apply to the facility, and the date of each shipment.
- (2) Identification of the coating operations producing waste materials included in each shipment and the month or months in which you used the allowance for these materials in Equation 1 of § 63.4951.
- (3) The methodology used in accordance with § 63.4951(e)(4) to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materi. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment.

#### (i) [Reserved]

- (j) You must keep records of the date, time, and duration of each deviation.
- (k) If you use the emission rate with add-on controls option, you must keep the records specified paragraphs (k)(1) through (8) of this section.
- (1) For each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction.
  - (2) The records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
- (3) The records required to show continuous compliance with each operating limit specified in Table 1 to this subpart that applies to you.
- (4) For each capture system that is a PTE, the data and documentation you used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR par 51 for a PTE and has a capture efficiency of 100 percent, as specified in § 63.4964(a).
- (5) For each capture system that is not a PTE, the data and documentation you used to determine capture efficiency according to the requirements specified in §§ 63.4963 and 63.4964(b) through (e), including the records specified in paragraphs (k)(5)(i) through (iii) of this section that apply to you.
- (i) Records for a liquid-to-uncaptured-gas protocol using a temporary total enclosure or building enclosure. Records of the mass of total volatile hydrocarbon (TVH) as measured by Method 204A or of appendix M to 40 CFR part 51 for each material used in the coating operation, and the total TVH f all materials used, during each capture efficiency test run, including a copy of the test report. Record the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run, as measured by Method 204 or E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFF part 51 for either a temporary total enclosure or a building enclosure.
- (ii) Records for a gas-to-gas protocol using a temporary total enclosure or a building enclosure. Records of the mass of TVH emissions captured by the emission capture system as measured by Method 204B or C of appendix M to 40 CFR part 51 at the inlet to the add-on control device, includin copy of the test report. Records of the mass of TVH emissions not captured by the capture system the exited the temporary total enclosure or building enclosure during each capture efficiency test run, as measured by Method 204D or E of appendix M to 40 CFR part 51, including a copy of the test report Records documenting that the enclosure used for the capture efficiency test met the criteria in Metho 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.
- (iii) Records for an alternative protocol. Records needed to document a capture efficiency determination using an alternative method or protocol as specified in § 63.4964(e), if applicable.
- (6) The records specified in paragraphs (k)(6)(i) and (ii) of this section for each add-on control device organic HAP destruction or removal efficiency determination as specified in § 63.4965.
- (i) Records of each add-on control device performance test conducted according to §§ 63.4963 63.4965.
  - (ii) Records of the coating operation conditions during the add-on control device performance te

showing that the performance test was conducted under representative operating conditions.

- (7) Records of the data and calculations you used to establish the emission capture and add-on control device operating limits as specified in § 63.4966 and to document compliance with the operal limits as specified in Table 1 to this subpart.
- (8) A record of the work practice plan required by § 63.4893 and documentation that you are implementing the plan on a continuous basis.

## § 63.4931 In what form and for 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). Where appropriate, the records may be maintained as electronic spreadsheets or a database.
- (b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of eaccurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1). You may keep these records off-site for the remaining 3 years. You must keep records on-site pertaining to the design and manufacturer's specifications for operation of add-on control equipment for the life of the equipment.

## Compliance Requirements for the Compliant Material Option

#### § 63.4940 By what date must I conduct the initial compliance demonstration?

You must complete the initial compliance demonstration for the initial compliance period according to the requirements in § 63.4941. The initial compliance period begins on the applicable compliance date specified in § 63.4883 and ends on the last day of the first full month following the compliance date. The initial compliance demonstration includes the calculations according to § 63.4941 and supporting documentation showing that, during the initial compliance period, you used no coating will an organic HAP content that exceeded the applicable emission limit in § 63.4890, and you used no thinners or cleaning materials that contained organic HAP.

#### § 63.4941 How do I demonstrate initial compliance with the emission limitations?

You may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source to demonstrate compliance with an organic HAP emission limit. You must use either the emission rate without add-on controls option or the emission rate with add-on controls option for any coating opera in the affected source for which you do not use this option. To demonstrate initial compliance using t compliant material option, during the compliance period the coating operation or group of coating operations must use no coating with an organic HAP content that exceeds the applicable emission linin § 63.4890 and must use no thinner or cleaning material that contains organic HAP as determined according to this section. Any coating operation for which you use the compliant material option is not required to comply with the operating limits or work practice standards required in §§ 63.4892 and 63.4893, respectively. To demonstrate initial compliance with the emission limitations using the compliant material option, you must meet all the requirements of this section for the coating operation

group of coating operations using this option. Use the procedures in this section for each coating thinner, and cleaning material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. You do not need to redetermine the organic HAP content of cleaning materials that are reclaimed and reused onsite provided these materials in their condition as received were demonstrated to comply with the compliant material option.

- (a) Determine the mass fraction of organic HAP for each material used. You must determine the mass fraction of organic HAP for each coating, thinner, and cleaning material used during the compliance period by using one of the options in paragraphs (a)(1) through (5) of this section.
- (1) Method 311 (appendix A to 40 CFR part 63). You may use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in paragraphs (a)(1)(i) and (ii) of this section when performing a Method 311 test.
- (i) Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other organic HAP compounds. For example toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do no have to count it. Express the mass fraction of each organic HAP you count as a value truncated to fc places after the decimal point (for example, 0.3791).
- (ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individuorganic HAP mass fractions and truncating the result to three places after the decimal point (for example, 0.763).
- (2) Method 24 (appendix A to 40 CFR part 60). For coatings, you may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction organic HAP.
- (3) Alternative method. You may use an alternative test method for determining the mass fractio of organic HAP once the Administrator has approved it. You must follow the procedure in § 63.7(f) to submit an alternative test method for approval.
- (4) Information from the supplier or manufacturer of the material. You may rely on information ot than that generated by the test methods specified in paragraphs (a)(1) through (3) of this section, su as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent b mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other organic HAP compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to count it. If there is a disagreement between such information and results of a test conducted according to paragraphs (a) through (3) of this section, then the test method results will take precedence.
- (5) Solvent blends. Solvent blends may be listed as single components for some materials in da provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, you may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 3 or 4 to this subpart. If you use the tables, you must use the values in Table 3 for all solvent blends that match Table 3 entries, and you may only use Table 4 if the solvent blends in the materials you use do not match any of the solvent blends in Table 3, and you only know whether the blend is aliphatic or aromatic. However, if the resu

of a Method 311 test indicate higher values than those listed on Table 3 or 4 of this subpart, the Method 311 results will take precedence.

- (b) Determine the volume fraction of coating solids for each coating. You must determine the volume fraction of coating solids (liters of coating solids per liter of coating) for each coating used du the compliance period by a test or by information provided by the supplier or the manufacturer of the material, as specified in paragraphs (b)(1), (2), and (3) of this section. If test results obtained accordi to paragraph (b)(1) of this section do not agree with the information obtained under paragraph (b)(2) (3) of this section, the test results will take precedence.
- (1) Test results. You may use ASTM Method D2697-86 (Reapproved 1998), "Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings" (incorporated by reference, s § 63.14), or D6093-97, "Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer" (incorporated by reference, see § 63.14), to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume perce obtained with the methods by 100 to calculate volume fraction of coating solids. Alternatively, you make another test method once you obtain approval from the Administrator according to the requirement of § 63.7(f).
- (2) *Information from the supplier or manufacturer of the material.* You may obtain the volume fraction of coating solids for each coating from the supplier or manufacturer.
- (3) Calculation of volume fraction of coating solids. If the volume fraction of coating solids canno be determined using the options in paragraphs (b)(1) and (2) of this section, you must determine it using Equation 1 of this section:

$$V_s = 1 - \frac{M_{\text{volatiles}}}{D_{\text{avg}}}$$
 (Eq. 1)

Where:

V<sub>s</sub> = Volume fraction of coating solids, liters coating solids per liter coating.

- M<sub>volatiles</sub> = Total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water and exempt compounds, determined according to Method 24 in appendix A of 40 CFR part 60, grams volatile matter per liter coating.
- D<sub>avg</sub> = Average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determine from test results using ASTM Method D1475-90, information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-90 test results and other information sources, the test results will take precedence.
- (c) Determine the density of each coating. You must determine the density of each coating used during the compliance period from test results using ASTM Method D1475-90 or information from the supplier or manufacturer of the material. If there is disagreement between ASTM Method D1475-90 results and the supplier's or manufacturer's information, the test results will take precedence.
- (d) Calculate the organic HAP content of each coating. Calculate the organic HAP content, kg organic HAP per liter coating solids, of each coating used during the compliance period, using Equat

2 of this section, except that if the mass fraction of organic HAP in the coating equals zero, then organic HAP content also equals zero and you are not required to use Equation 2 to calculate the organic HAP content.

$$H_c = \frac{(D_c)(W_c)}{V_c}$$
 (Eq. 2)

Where:

H<sub>c</sub> = Organic HAP content of the coating, kg organic HAP per liter coating solids.

D<sub>c</sub> = Density of coating, kg coating per liter coating, determined according to paragraph (c) of this section.

W<sub>c</sub> = Mass fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to paragraph (a) of this section.

V<sub>s</sub> = Volume fraction of coating solids, liter coating solids per liter coating, determined according to paragraph of this section.

(e) Compliance demonstration. The calculated organic HAP content for each coating used durin the initial compliance period must be less than or equal to the applicable emission limit in § 63.4890 each thinner and cleaning material used during the initial compliance period must contain no organic HAP, determined according to paragraph (a) of this section. You must keep all records required by §§ 63.4930 and 63.4931. As part of the Notification of Compliance Status required in § 63.4910(c) at the semiannual compliance reports required in § 63.4920, you must identify each coating operation a group of coating operations for which you used the compliant material option. If there were no deviations from the emission limit, include a statement that each was in compliance with the emission limitations during the initial compliance period because it used no coatings for which the organic HAF content exceeded the applicable emission limit in § 63.4890, and it used no thinners or cleaning materials that contained organic HAP.

#### § 63.4942 How do I demonstrate continuous compliance with the emission limitations?

- (a) Following the initial compliance period, you must complete a compliance demonstration according to the requirements in § 63.4941(e) for each subsequent compliance period. Each month following the initial compliance period described in § 63.4940 is a compliance period.
- (b) If you choose to comply with the emission limitations by using the compliant material option, use of any coating, thinner, or cleaning material that does not meet the criteria specified in paragraph (a) of this section is a deviation from the emission limitations that must be reported as specified in §§ 63.4910(c)(6) and 63.4920(a)(5).
- (c) As part of each semiannual compliance report required by § 63.4920, you must identify the coating operation or group of coating operations for which you used the compliant material option. If there were no deviations from the emission limits in § 63.4890, submit an affirmative statement that t coating operation or group of coating operations was in compliance with the emission limitations duri the reporting period because you used no coating for which the organic HAP content exceeded the applicable emission limit in § 63.4890, and you used no thinner or cleaning material that contained organic HAP.

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(d) You must maintain records as specified in §§ 63.4930 and 63.4931.

## Compliance Requirements for the Emission Rate Without Add-On Controls Option

## § 63.4950 By what date must I conduct the initial compliance demonstration?

You must complete the initial compliance demonstration for the initial compliance period accordi to the requirements of § 63.4951. The initial compliance period begins on the applicable compliance date specified in § 63,4883 and ends on the last day of the first full month following the compliance date. The initial compliance demonstration includes the calculations showing that the organic HAP emission rate for the initial compliance period was equal to or less than the applicable emission limit § 63.4890.

## § 63.4951 How do I demonstrate initial compliance with the emission limitations?

You may use the emission rate without add-on controls option for any individual coating operation for any group of coating operations in the affected source, or for all the coating operations in the affected source to demonstrate compliance with an organic HAP emission limit. You must use either compliant material option or the emission rate with add-on controls option for any coating operation i the affected source for which you do not use this option. To demonstrate initial compliance using the emission rate without add-on controls option, the coating operation or group of coating operations me comply with the applicable emission limit in § 63.4890, but is not required to meet the operating limit work practice standards in §§ 63.4892 and 63.4893, respectively. You must meet all the requirement of this section to demonstrate initial compliance with the applicable emission limit in § 63.4890 for the coating operation or group of coating operations. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners, or cleaning materials used on coating operations for which you use the compliant material option or the emission rate with add-on controls option. You do not need to include organic HAP in coatings, thinners, or cleaning materials that have been reclaimed onsite and reused in the coating operation for which you use the emission rate witho add-on controls option.

- (a) Determine the mass fraction of organic HAP for each material. You must determine the mass fraction of organic HAP for each coating, thinner, and cleaning material used during the compliance period according to the requirements in § 63.4941(a).
- (b) Determine the volume fraction of coating solids for each coating. You must determine the volume fraction of coating solids for each coating used during the compliance period according to the requirements in § 63.4941(b).
- (c) Determine the density of each material. You must determine the density of each coating. thinner, and cleaning material used during the compliance period according to the requirements in § 63.4941(c) from test results using ASTM Method D1475-90, information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-90 test results and such other information sources, the test results will take precedence.
- (d) Determine the volume of each material used. You must determine the volume (liters) of each coating, thinner, and cleaning material used during the compliance period by measurement or usage records.

(e) Calculate the mass of organic HAP emissions. The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners, and cleaning materials used durir the compliance period minus the organic HAP in certain waste materials. Use Equation 1 of this sect to calculate the mass of organic HAP emissions:

$$H_{\bullet} = A + B + C - R_{w}$$
 (Eq. 1)

Where:

H<sub>e</sub> = Total mass of organic HAP emissions during the compliance period, kg.

- A = Total mass of organic HAP in the coatings used during the compliance period, kg, as calculated in Equatio 1A of this section.
- B = Total mass of organic HAP in the thinners used during the compliance period, kg, as calculated in Equation 1B of this section.
- C = Total mass of organic HAP in the cleaning materials used during the compliance period, kg, as calculated Equation 1C of this section.
- $R_{\rm w}$  = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSC for treatment or disposal during the compliance period, kg, determined according to paragraph (e)(4) this section. The mass of any waste material reused during the same compliance period may not be included in  $R_{\rm w}$ . (You may assign a value of zero to  $R_{\rm w}$  if you do not wish to use this allowance.)
- (1) Calculate the mass of organic HAP in the coatings used during the compliance period, using Equation 1A of this section:

$$A = \sum_{i=1}^{m} (Vol_{c,i}) (D_{c,i}) (W_{c,i}) \qquad (Eq. 1A)$$

Where:

A = Total mass of organic HAP in the coatings used during the compliance period, kg.

Vol<sub>ci</sub> = Total volume of coating, i, used during the compliance period, liters.

D<sub>c.i</sub> = Density of coating, i, kg coating per liter coating.

W<sub>c,i</sub> = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating.

m = Number of different coatings used during the compliance period.

(2) Calculate the mass of organic HAP in the thinners used during the compliance period, using Equation 1B of this section:

$$B = \sum_{i=1}^{n} (V \circ l_{t,i}) (D_{t,i}) (W_{t,i})$$
 (Eq. 1B)

Where:

B = Total mass of organic HAP in the thinners used during the compliance period, kg.

Vol<sub>t,i</sub> = Total volume of thinner, j, used during the compliance period, liters.

 $D_{ti}$  = Density of thinner, j, kg per liter.

W<sub>t i</sub> = Mass fraction of organic HAP in thinner, j, kg organic HAP per kg thinner.

n = Number of different thinners used during the compliance period.

(3) Calculate the mass of organic HAP in the cleaning materials used during the compliance per using Equation 1C of this section:

$$C = \sum_{k=1}^{p} \left( Vol_{s,k} \right) \left( D_{s,k} \right) \left( W_{s,k} \right) \qquad \text{(Eq. 1C)}$$

Where:

C = Total mass of organic HAP in the cleaning materials used during the compliance period, kg.

 $Vol_{s,k}$  = Total volume of cleaning material, k, used during the compliance period, liters.

 $D_{sk}$  = Density of cleaning material, k, kg per liter.

 $W_{s,k}$  = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.

p = Number of different cleaning materials used during the compliance period.

- (4) If you choose to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in the calculation of the total mass of organic H emissions during the compliance period in Equation 1 of this section, then you must determine the to mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during each compliance period, according to paragraphs (e)(4)(i) through (in of this section.
- (i) You may include in the determination of the total mass of organic HAP in waste materials ser designated for shipment to a hazardous waste TSDF for treatment or disposal during each compliant period only waste materials that are generated by coating operations for which you use Equation 1 of this section and that will be treated or disposed of by a facility regulated as a TSDF under 40 CFR paragraph 262, 264, 265, or 266. The TSDF may be either off-site or on-site. You may not include in the determination of the total mass of organic HAP in waste materials sent or designated for shipment to hazardous waste TSDF for treatment or disposal during each compliance period only waste material that are generated by coating operations the organic HAP contained in wastewater, nor the organic HAP contained in any waste material reused during the same compliance period.
- (ii) You must determine either the amount of the waste materials sent to a TSDF during the compliance period or the amount collected and stored during the compliance period and designated future transport to a TSDF. Do not include in your determination of the total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposituring each compliance period only waste materials that are generated by coating operations any

waste materials sent to a TSDF during a compliance period if you have already included them ir the amount collected and stored during that or a previous compliance period.

- (iii) Determine the total mass of organic HAP contained in the waste materials specified in paragraph (e)(4)(ii) of this section.
- (iv) You must document your methodology to determine the amount of waste materials and the total mass of organic HAP they contain, as required in § 63.4930(h). To the extent that waste manife include this information, they may be used as part of the documentation of the amount of waste materials and mass of organic HAP contained in them.
- (f) Calculate the total volume of coating solids used. Calculate the total volume of coating solids used, which is the combined volume of coating solids for all the coatings used during the compliance period, using Equation 2 of this section:

$$V_{st} = \sum_{i=1}^{m} (V \circ l_{c,i}) (V_{s,i})$$
 (Eq. 2)

Where:

V<sub>st</sub> = Total volume of coating solids used during the compliance period, liters.

Vol<sub>ci</sub> = Total volume of coating, i, used during the compliance period, liters.

 $V_{s,i}$  = Volume fraction of coating solids for coating, i, liter solids per liter coating, determined according to § 63.4941(b).

m = Number of coatings used during the compliance period.

(g) Calculate the organic HAP emission rate. Calculate the organic HAP emission rate for the compliance period, kg organic HAP per liter coating solids used, using Equation 3 of this section:

$$H_{wg} = \frac{H_e}{V}.$$
 (Eq. 3)

Where:

 $H_{avg}$  = Organic HAP emission rate for the compliance period, kg organic HAP per liter coating solids.

 $H_e$  = Total mass of organic HAP emissions from all materials used during the compliance period, kg, as calculated by Equation 1 of this section.

V<sub>st</sub> = Total volume of coating solids used during the compliance period, liters, as calculated by Equation 2 of th section.

(h) Compliance demonstration. The calculated organic HAP emission rate for the initial compliant period must be less than or equal to the applicable emission limit in § 63.4890. You must keep all records as required by §§ 63.4930 and 63.4931. As part of the Notification of Compliance Status required by § 63.4910 and the semiannual compliance reports required in § 63.4920, you must ident

the coating operation or group of coating operations for which you used the emission rate without add-on controls option. If there were no deviations from the emission limit, include a statement that the coating operation or group of coating operations was in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in § 63.4890, determined according to this section.

### § 63.4952 How do I demonstrate continuous compliance with the emission limitations?

- (a) Following the initial compliance period, you must complete a compliance demonstration according to the requirements in § 63.4951(h) for each subsequent compliance period. Each month following the initial compliance period described in § 63.4950 is a compliance period.
- (b) If the organic HAP emission rate for any compliance period exceeded the applicable emissio limit in § 63.4890, this is a deviation from the emission limitations for that compliance period and must be reported as specified in §§ 63.4910(c)(6) and 63.4920(a)(6).
- (c) As part of each semiannual compliance report required by § 63.4920, you must identify the coating operation or group of coating operations for which you used the emission rate without add-or controls option. If there were no deviations from the emission limitations, you must submit an affirma statement that the coating operation or group of coating operations was in compliance with the emiss limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in § 63.4890.
  - (d) You must maintain records as specified in §§ 63.4930 and 63.4931.

### Compliance Requirements for the Emission Rate With Add-On Controls Option

## § 63.4960 By what date must I conduct performance tests and other initial compliance demonstrations?

- (a) New and reconstructed affected sources. For a new or reconstructed affected source, you m meet the requirements of paragraphs (a)(1) through (4) of this section.
- (1) All emission capture systems, add-on control devices, and CPMS must be installed and operating no later than the applicable compliance date specified in § 63.4883. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4961(j), you must conduct a performance test of each capture system and add-on control device according to §§ 63.4963, 63.4964, and 63.4965, and establish the operating limits required by § 63.4892, no later than 180 days after the applicable compliance date specified in § 63.4883. For a solvent recovery system for which you conduct liquid-liquid material balances according to § 63.4961(j), you must initi the first material balance no later than 180 days after the applicable compliance date specified in § 63.4883.
- (2) You must develop and begin implementing the work practice plan required by § 63.4893 no later than the compliance date specified in § 63.4883.
- (3) You must complete the initial compliance demonstration for the initial compliance period according to the requirements of § 63.4961. The initial compliance period begins on the applicable compliance date specified in § 63.4883 and ends on the last day of the first full month following the compliance date. The initial compliance demonstration includes the results of emission capture systematical experience.

and add-on control device performance tests conducted according to §§ 63.4963, 63.4964, and 63.4965; results of liquid-liquid material balances conducted according to § 63.4961(j); calculations showing whether the organic HAP emission rate for the initial compliance period was equal to or less than the emission limit in § 63.4890; the operating limits established during the performance tests an the results of the continuous parameter monitoring required by § 63.4967; and documentation of whether you developed and implemented the work practice plan required by § 63.4893.

- (4) You do not need to comply with the operating limits for the emission capture system and adc control device required by § 63.4892 until after you have completed the performance tests specified paragraph (a)(1) of this section. Instead, you must maintain a log detailing the operation and maintenance of the emission capture system, add-on control device, and continuous parameter monitors during the period between the compliance date and the performance test. You must begin complying with the operating limits for your affected source on the date you complete the performance tests specified in paragraph (a)(1) of this section. The requirements in this paragraph (a)(4) do not at to solvent recovery systems for which you conduct liquid-liquid material balances.
- (b) Existing affected sources. For an existing affected source, you must meet the requirements of paragraphs (b)(1) through (3) of this section.
- (1) All emission capture systems, add-on control devices, and CPMS must be installed and operating no later than the applicable compliance date specified in § 63.4883. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4961(j), you must conduct a performance test of each capture system and add-on control device according to the procedures in §§ 63.4963, 63.4964, and 63.4965, and establish the operating limits required by § 63.4892, no later than the compliance date specified in § 63.4883. For a solvent recovery system f which you conduct liquid-liquid material balances according to § 63.4961(j), you must initiate the first material balance no later than the compliance date specified in § 63.4883.
- (2) You must develop and begin implementing the work practice plan required by § 63.4893 no later than the compliance date specified in § 63.4883.
- (3) You must complete the initial compliance demonstration for the initial compliance period according to the requirements of § 63.4961. The initial compliance period begins on the applicable compliance date specified in § 63.4883 and ends on the last day of the first full month following the compliance date. The initial compliance demonstration includes the results of emission capture syste and add-on control device performance tests conducted according to §§ 63.4963, 63.4964, and 63.4965; results of liquid-liquid material balances conducted according to § 63.4961(j); calculations showing whether the organic HAP emission rate for the initial compliance period was equal to or less than the emission limit in § 63.4890(c); the operating limits established during the performance tests and the results of the continuous parameter monitoring required by § 63.4967; and documentation of whether you developed and implemented the work practice plan required by § 63.4893.

## § 63.4961 How do I demonstrate initial compliance?

(a) When add-on controls are used. You may use the emission rate with add-on controls option any coating operation, for any group of coating operations in the affected source, or for all of the coa operations in the affected source. You may include both controlled and uncontrolled coating operatio in a group for which you use this option. You must use either the compliant material option or the emission rate without add-on controls option for any coating operation in the affected source for whic you do not use the emission rate with add-on controls option. To demonstrate initial compliance, the

coating operation or group of coating operations for which you use the emission rate with add-or controls option must meet the applicable emission limit in § 63.4890, and each controlled coating operation must meet the operating limits and work practice standards required in §§ 63.4892 and 63.4893, respectively. You must meet all the requirements of this section to demonstrate initial compliance with the emission limitations. When calculating the organic HAP emission rate according this section, do not include any coatings, thinners, or cleaning materials used on coating operations which you use the compliant material option or the emission rate without add-on controls option.

- (b) Compliance with operating limits. Except as provided in § 63.4960(a)(4), you must establish demonstrate continuous compliance during the initial compliance period with the operating limits required by § 63.4892, using the procedures specified in §§ 63.4966 and 63.4967.
- (c) Compliance with work practice requirements. You must develop, implement, and document y implementation of the work practice plan required by § 63.4893 during the initial compliance period, a specified in § 63.4930.
- (d) Compliance with emission limits. You must follow the procedures in paragraphs (e) through (of this section to demonstrate compliance with the applicable emission limit in § 63.4890.
- (e) Determine the mass fraction of organic HAP, density, volume used, and volume fraction of coating solids. Follow the procedures specified in § 63.4951(a) through (d) to determine the mass fraction of organic HAP, density, and volume of each coating, thinner, and cleaning material used during each compliance period and the volume fraction of coating solids for each coating used during each compliance period.
- (f) Calculate the total mass of organic HAP emissions before add-on controls. Using Equation 1 § 63.4951, calculate the total mass of organic HAP emissions before add-on controls from all coating thinners, and cleaning materials used during the compliance period.
- (g) Calculate the organic HAP emission reduction for each controlled coating operation. Determit the mass of organic HAP emissions reduced for each controlled coating operation during each compliance period. The emission reduction determination quantifies the total organic HAP emissions that pass through the emission capture system and are destroyed or removed by the add-on control device. Use the procedures in paragraph (h) of this section to calculate the mass of organic HAP emission reduction for each controlled coating operation using an emission capture system and add-control device other than a solvent recovery system for which you conduct liquid-liquid material balances. For each controlled coating operation using a solvent recovery system for which you conduct liquid-liquid material balance, use the procedures in paragraph (j) of this section to calculate the organic HAP emission reduction.
- (h) Calculate the organic HAP emission reduction for controlled coating operations not using liquid material balance. For each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid mater balances, calculate the organic HAP emission reduction, using Equation 1 of this section. The calculation applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coatings, thinners, and cleaning materials that are used in the coating operation served by the emission capture system and add-on control device during the compliance period. For any period of time a deviation specified in § 63.4962(c) or (d) occurs in the controlled coating operation, including a deviation during a period of startup, shutdown, or malfunctic you must assume zero efficiency for the emission capture system and add-on control device. Equation

1 of this section treats the materials used during such a deviation as if they were used on an uncontrolled coating operation for the time period of the deviation:

$$H_R = (A_I + B_I + C_I - R_w) \left( \frac{CE}{100} \times \frac{DRE}{100} \right) + H_{unc}$$
 (Eq. 1)

Where:

- H<sub>R</sub> = Mass of organic HAP emission reduction for the controlled coating operation during the compliance perior kg.
- A<sub>I</sub> = Total mass of organic HAP in the coatings used in the controlled coating operation during the compliance period, excluding coatings used during deviations, kg, as calculated in Equation 1A of this section.
- B<sub>I</sub> = Total mass of organic HAP in the thinners used in the controlled coating operation during the compliance period, excluding thinners used during deviations, kg, as calculated in Equation 1B of this section.
- C<sub>I</sub> = Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the compliance period, excluding cleaning materials used during deviations, kg, as calculated in Equation of this section.
- $R_{\rm w}$  = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSE for treatment or disposal during the compliance period, kg, determined according to § 63.4951(e)(4). mass of any waste material reused during the same compliance period may not be included in  $R_{\rm w}$ . (Y may assign a value of zero to  $R_{\rm w}$  if you do not wish to use this allowance.)
- CE = Capture efficiency of the emission capture system vented to the add-on control device, percent. Use the methods and procedures specified in §§ 63.4963 and 63.4964 to measure and record capture efficier
- DRE = Organic HAP destruction or removal efficiency of the add-on control device, percent. Use the test method and procedures in §§ 63.4963 and 63.4965 to measure and record the organic HAP destruction or removal efficiency.
- H<sub>unc</sub> = Total mass of organic HAP in the coatings, thinners, and cleaning materials used during all deviations specified in § 63.4962(c) and (d) that occurred during the compliance period in the controlled coating operation, kg, as calculated in Equation 1D of this section.
- (1) Calculate the mass of organic HAP in the coatings used in the controlled coating operation, using Equation 1A of this section. Do not include in the calculation the coatings used during any deviation specified in § 63.4962(c) or (d) that occurred during the month. Include such coatings in the calculation of the total mass of organic HAP in the coatings, thinners, and cleaning materials used during all deviations that occurred during the compliance period in the controlled coating operation in Equation 1D of this section.

$$A_{\rm I} = \sum_{i=1}^{m} \left( \operatorname{Vol}_{c,i} \right) \left( \operatorname{D}_{c,i} \right) \left( \operatorname{W}_{c,i} \right) \quad \text{(Eq. 1A)}$$

Where:

A<sub>I</sub> = Total mass of organic HAP in the coatings used in the controlled coating operation during the compliance period, excluding coatings used during deviations, kg.

Vol<sub>c.i</sub> = Total volume of coating, i, used during the compliance period except during deviations, liters.

 $D_{ci}$  = Density of coating, i, kg per liter.

W<sub>c.i</sub> = Mass fraction of organic HAP in coating, i, kg per kg.

m = Number of different coatings used.

(2) Calculate the mass of organic HAP in the thinners used in the controlled coating operation, using Equation 1B of this section. Do not include in the calculation the thinners used during any deviation specified in § 63.4962(c) or (d) that occurred during the month. Include such coatings in the calculation of the total mass of organic HAP in the coatings, thinners, and cleaning materials used during all deviations that occurred during the compliance period in the controlled coating operation in Equation 1D of this section.

$$B_{I} = \sum_{j=1}^{n} (V \circ l_{t,j}) (D_{t,j}) (W_{t,j}) \qquad (Eq. 1B)$$

Where:

B<sub>I</sub> = Total mass of organic HAP in the thinners used in the controlled coating operation during the compliance period, excluding thinners used during deviations, kg.

 $Vol_{ti}$  = Total volume of thinner, j, used during the compliance period except during deviations, liters.

 $D_{ti}$  = Density of thinner, j, kg per liter.

 $W_{t,i}$  = Mass fraction of organic HAP in thinner, j, kg per kg.

n = Number of different thinners used.

(3) Calculate the mass of organic HAP in the cleaning materials used in the controlled coating operation, using Equation 1C of this section. Do not include in the calculation the cleaning materials used during any deviation specified in § 63.4962(c) or (d) that occurred during the compliance perior Include such cleaning materials in the calculation of the total mass of organic HAP in the coatings, thinners, and cleaning materials used during all deviations that occurred during the compliance perior in the controlled coating operation in Equation 1D of this section.

$$C_{I} = \sum_{k=1}^{p} (Vol_{s,k}) (D_{s,k}) (W_{s,k}) \quad (Eq. 1C)$$

Where:

C<sub>I</sub> = Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the compliance period, excluding cleaning materials used during deviations, kg.

Vol<sub>s,k</sub> = Total volume of cleaning material, k, used during the compliance period except during deviations, liters

 $D_{s,k}$  = Density of cleaning material, k, kg per liter.

W<sub>s k</sub> = Mass fraction of organic HAP in cleaning material, k, kg per kg.

p = Number of different cleaning materials used.

(4) Calculate the mass of organic HAP in the coatings, thinners, and cleaning materials used in controlled coating operation during deviations specified in § 63.4962(c) and (d), using Equation 1D o this section:

$$H_{uw} = \sum_{h=1}^{q} (Vol_h) (D_h) (W_h) \qquad (Eq. 1D)$$

Where:

H<sub>unc</sub> = Total mass of organic HAP in the coatings, thinners, and cleaning materials used during all deviations specified in § 63.4962(c) and (d) that occurred during the compliance period in the controlled coating operation, kg.

Vol<sub>h</sub> = Total volume of coating, thinner, or cleaning material, h, used in the controlled coating operation during deviations, liters.

D<sub>h</sub> = Density of coating, thinner, or cleaning material, h, kg per liter.

W<sub>h</sub> = Mass fraction of organic HAP in coating, thinner, or cleaning material, h, kg organic HAP per kg coating.

q = Number of different coatings, thinning solvents, or cleaning materials.

#### (i) [Reserved]

- (j) Calculate the organic HAP emission reduction for controlled coating operations using liquid-liquid material balance. For each controlled coating operation using a solvent recovery system for why you conduct liquid-liquid material balances, calculate the organic HAP emission reduction by applyin the volatile organic matter collection and recovery efficiency to the mass of organic HAP contained in the coatings, thinners, and cleaning materials that are used in the coating operation controlled by the solvent recovery system during the compliance period. Perform a liquid-liquid material balance for excompliance period as specified in paragraphs (j)(1) through (6) of this section. Calculate the mass of organic HAP emission reduction by the solvent recovery system as specified in paragraph (j)(7) of the section.
- (1) For each solvent recovery system, you must install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile organic matter recovered by the solvent recovery system each compliance period. The device must be initial certified by the manufacturer to be accurate to within ±2.0 percent of the mass of volatile organic manufacturer.
- (2) For each solvent recovery system, determine the mass of volatile organic matter recovered f the compliance period, based on measurement with the device required in paragraph (j)(1) of this section.
- (3) Determine the mass fraction of volatile organic matter for each coating, thinner, and cleaning material used in the coating operation controlled by the solvent recovery system during the complian

period. You may determine the volatile organic matter mass fraction using Method 24 of 40 CFF part 60, appendix A, or an EPA-approved alternative method, or you may use information provided b the manufacturer or supplier of the coating. In the event of any inconsistency between information provided by the manufacturer or supplier and the results of Method 24 of 40 CFR part 60, appendix / or an approved alternative method, the test method results will govern.

- (4) Determine the density of each coating, thinner, and cleaning material used in the coating operation controlled by the solvent recovery system during the compliance period according to § 63.4951(c).
- (5) Measure the volume of each coating, thinner, and cleaning material used in the coating operation controlled by the solvent recovery system during the compliance period.
- (6) For each compliance period, calculate the solvent recovery system's volatile organic matter collection and recovery efficiency, using Equation 2 of this section:

$$R_{v} = 100 \frac{M_{VR}}{\sum_{i=1}^{m} Vol_{i} D_{i} W V_{c,i} + \sum_{j=1}^{n} Vol_{j} D_{j} W V_{i,j} + \sum_{k=1}^{p} Vol_{k} D_{k} W V_{s,k}}$$
 (Eq. 2)

Where:

R<sub>V</sub> = Volatile organic matter collection and recovery efficiency of the solvent recovery system during the compliance period, percent.

 $M_{VR}$  = Mass of volatile organic matter recovered by the solvent recovery system during the compliance period,

Vol<sub>i</sub> = Volume of coating, i, used in the coating operation controlled by the solvent recovery system during the compliance period, liters.

 $D_i$  = Density of coating, i, kg per liter.

W<sub>c,i</sub> = Mass fraction of volatile organic matter for coating, i, kg volatile organic matter per kg coating.

Vol<sub>j</sub> = Volume of thinner, j, used in the coating operation controlled by the solvent recovery system during the compliance period, liters.

 $D_i$  = Density of thinner, j, kg per liter.

 $W_{ti}$  = Mass fraction of volatile organic matter for thinner, j, kg volatile organic matter per kg thinner.

Vol<sub>k</sub> = Volume of cleaning material, k, used in the coating operation controlled by the solvent recovery system during the compliance period, liters.

 $D_k$  = Density of cleaning material, k, kg per liter.

WV<sub>s,k</sub> = Mass fraction of volatile organic matter for cleaning material, k, kg volatile organic matter per kg cleani material.

m = Number of different coatings used in the coating operation controlled by the solvent recovery system durin the compliance period.

- n = Number of different thinners used in the coating operation controlled by the solvent recovery system during compliance period.
- p = Number of different cleaning materials used in the coating operation controlled by the solvent recovery sysduring the compliance period.
- (7) Calculate the mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system during the compliance period, using Equation 3 of this section:

$$H_{CSR} = \left(A_{CSR} + B_{CSR} + C_{CSR}\right) \left(\frac{R_{V}}{100}\right)$$
 (Eq. 3)

Where:

- H<sub>CSR</sub> = Mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system during the compliance period, kg.
- A<sub>CSR</sub> = Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recov system, kg, calculated using Equation 3A of this section.
- B<sub>CSR</sub> = Total mass of organic HAP in the thinners used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3B of this section.
- C<sub>CSR</sub> = Total mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvecovery system, kg, calculated using Equation 3C of this section.
- R<sub>V</sub> = Volatile organic matter collection and recovery efficiency of the solvent recovery system, percent, from Equation 2 of this section.
- (i) Calculate the mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, kg, using Equation 3A of this section.

$$A_{CSR} = \sum_{i=1}^{m} (Vol_{c,i})(D_{c,i})(W_{c,i})$$
(Eq. 3A)

Where:

- A<sub>CSR</sub> = Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recov system during the month, kg.
- Vol<sub>c,i</sub> = Total volume of coating, i, used during the month in the coating operation controlled by the solvent recovery system, liters.

D<sub>c,i</sub> = Density of coating, i, kg coating per liter coating.

W<sub>c,i</sub> = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating.

m = Number of different coatings used.

(ii) Calculate the mass of organic HAP in the thinners used in the coating operation controlled by the solvent recovery system, using Equation 3B of this section:

$$B_{CSR} = \sum_{j=1}^{n} (V \circ l_{t,j}) (D_{t,j}) (W_{t,j})$$
(Eq. 3B)

Where:

B<sub>CSR</sub> = Total mass of organic HAP in the thinners used in the coating operation controlled by the solvent recovery system during the month, kg.

Vol<sub>t,j</sub> = Total volume of thinner, j, used during the month in the coating operation controlled by the solvent recoversystem, liters.

 $D_{ti}$  = Density of thinner, j, kg thinner per liter thinner.

 $W_{t,j}$  = Mass fraction of organic HAP in thinner, j, kg organic HAP per kg thinner.

n = Number of different thinners used.

(iii) Calculate the mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system during the month, using Equation 3C of this section:

$$C_{CSR} = \sum_{k=1}^{p} (Vol_{sk}) (D_{sk}) (W_{sk})$$
(Eq. 3C)

Where:

C<sub>CSR</sub> = Total mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvecovery system during the month, kg.

Vol<sub>s,k</sub> = Total volume of cleaning material, k, used during the month in the coating operation controlled by the solvent recovery system, liters.

D<sub>s,k</sub> = Density of cleaning material, k, kg cleaning material per liter cleaning material.

W<sub>s,k</sub> = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg cleaning material.

p = Number of different cleaning materials used.

- (k) Calculate the total volume of coating solids used. Calculate the total volume of coating solids used, which is the combined volume of coating solids for all the coatings used during the compliance period, using Equation 2 of § 63.4951.
- (I) Calculate the organic HAP emissions rate. Calculate the organic HAP emission rate to the atmosphere, using Equation 4 of this section:

$$H_{\text{leap}} = \frac{H_{e} - \sum_{i=1}^{q} (H_{R,i}) - \sum_{j=1}^{r} (H_{CSR,j})}{V_{st}}$$
(Eq. 4)

Where:

H<sub>hap</sub> = Organic HAP emission rate for the compliance period, kg organic HAP per liter coating solids.

H<sub>e</sub> = Total mass of organic HAP emissions before add-on controls from all the coatings, thinners, and cleaning materials used during the compliance period, kg, determined according to paragraph (f) of this section

H<sub>R,i</sub> = Total mass of organic HAP emission reduction for controlled coating operation, i, not using liquid-liquid material balances, during the compliance period, kg, from Equation 1 of this section.

H<sub>CSR,j</sub> = Total mass of organic HAP emission reduction for controlled coating operation, j, using a liquid-liquid material balance, during the compliance period, kg, from Equation 3 of this section.

V<sub>st</sub> = Total volume of coating solids used during the compliance period, liters, from Equation 2 of § 63.4951.

q = Number of controlled coating operations except those controlled with a solvent recovery system.

r = Number of coating operations controlled with a solvent recovery system.

(m) Compliance demonstration. To demonstrate initial compliance with the emission limit during compliance period as calculated using Equation 4 of this section, the HAP emission rate for the compliance period must be less than or equal to the applicable emission limit in § 63.4890. You mus keep all records as required by §§ 63.4930 and 63.4931. As part of the Notification of Compliance Status required by § 63.4910 and the semiannual compliance reports required in § 63.4920, you must identify the coating operation or group of coating operations for which you used the emission rate wit add-on controls option. If there were no deviations from the emission limit, include a statement that the coating operation or group of coating operations was in compliance with the emission limitations durithe initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in § 63.4890, and you achieved the operating limits required by § 63.4892 at the work practice standards required by § 63.4893.

## § 63.4962 How do I demonstrate continuous compliance with the emission limitations?

- (a) Following the initial compliance period, you must complete a compliance demonstration according to the requirements in § 63.4961(m) for each subsequent compliance period. Each month following the initial compliance period described in § 63.4960 is a compliance period.
- (b) If the organic HAP emission rate for any compliance period exceeded the applicable emissio limit in § 63.4890, this is a deviation from the emission limitation for that compliance period and must reported as specified in §§ 63.4910(c)(6) and 63.4920(a)(7).
- (c) You must demonstrate continuous compliance with each operating limit required by § 63.489 that applies to you, as specified in Table 1 to this subpart.
  - (1) If an operating parameter is out of the allowed range specified in Table 1 to this subpart, this

a deviation from the operating limit that must be reported as specified in §§ 63.4910(c)(6) and 63.4920(a)(7).

- (2) If an operating parameter deviates from the operating limit specified in Table 1 to this subpar then you must assume that the emission capture system and add-on control device were achieving z efficiency during the time period of the deviation. For the purposes of completing the compliance calculations specified in § 63.4961, you must treat the materials used during a deviation on a control coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation, as indicated in Equation 1 of § 63.4961.
- (d) You must meet the requirements for bypass lines in § 63.4967(b) for controlled coating operations for which you do not conduct liquid-liquid material balances. If any bypass line is opened emissions are diverted to the atmosphere when the coating operation is running, this is a deviation the must be reported as specified in §§ 63.4910(c)(6) and 63.4920(a)(7). For the purposes of completing the compliance calculations in § 63.4961, you must treat the materials used during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation, as indicated in Equation 1 of § 63.4961.
- (e) You must demonstrate continuous compliance with the work practice standards in § 63.4893 you did not develop a work practice plan, or you did not implement the plan, or you did not keep the records required by § 63.4930(k)(8), this is a deviation from the work practice standards that must be reported as specified in §§ 63.4910(c)(6) and 63.4920(a)(7).
- (f) As part of each semiannual compliance report required in § 63.4920, you must identify the coating operation or group of coating operations for which you used the emission rate with add-on controls option. If there were no deviations from the emission limitations, submit an affirmative statement that you were in compliance with the emission limitations during the reporting period beca the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in § 63.4890, and you achieved the operating limits required by § 63.4892 and the wor practice standards required by § 63.4893 during each compliance period.
  - (g)-(h) [Reserved]
  - (i) You must maintain records as specified in §§ 63.4930 and 63.4931.

[68 FR 28619, May 23, 2003, as amended at 71 FR 20466, Apr. 20, 2006]

#### § 63.4963 What are the general requirements for performance tests?

- (a) You must conduct each performance test required by § 63.4960 according to the requiremer in § 63.7(e)(1) and under the conditions in this section unless you obtain a waiver of the performance test according to the provisions in § 63.7(h).
- (1) Representative coating operation operating conditions. You must conduct the performance to under representative operating conditions for the coating operation. Operations during periods of startup, shutdown, or malfunction, and during periods of nonoperation do not constitute representative conditions. You must record the process information that is necessary to document operating conditioning the test and explain why the conditions represent normal operation.
  - (2) Representative emission capture system and add-on control device operating conditions. Yo

must conduct the performance test when the emission capture system and add-on control devic are operating at a representative flow rate, and the add-on control device is operating at a representative inlet concentration. You must record information that is necessary to document emiss capture system and add-on control device operating conditions during the test and explain why the conditions represent normal operation.

- (b) You must conduct each performance test of an emission capture system according to the requirements in § 63.4964. You must conduct each performance test of an add-on control device according to the requirements in § 63.4965.
- (c) The performance test to determine add-on control device organic HAP destruction or remove efficiency must consist of three runs as specified in § 63.7(e)(3) and each run must last at least 1 hor

## § 63.4964 How do I determine the emission capture system efficiency?

You must use the procedures and test methods in this section to determine capture efficiency as part of the performance test required by § 63.4960.

- (a) Assuming 100 percent capture efficiency. You may assume the capture system efficiency is percent if both of the conditions in paragraphs (a)(1) and (2) of this section are met:
- (1) The capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and directs all the exhaust gases from the enclosure to an add-on control device.
- (2) All coatings, thinners, and cleaning materials used in the coating operation are applied withir the capture system; coating solvent flash-off and coating, curing, and drying occurs within the captur system; and the removal of or evaporation of cleaning materials from the surfaces they are applied to occurs within the capture system. For example, this criterion is not met if parts enter the open shop environment when being moved between a spray booth and a curing oven.
- (b) Measuring capture efficiency. If the capture system does not meet both of the criteria in paragraphs (a)(1) and (2) of this section, then you must use one of the three protocols described in paragraphs (c), (d), and (e) of this section to measure capture efficiency. The capture efficiency measurements use TVH capture efficiency as a surrogate for organic HAP capture efficiency. For the protocols in paragraphs (c) and (d) of this section, the capture efficiency measurement must consist three test runs. Each test run must be at least 3 hours duration or the length of a production run, whichever is longer, up to 8 hours. For the purposes of this test, a production run means the time required for a single part to go from the beginning to the end of production, which includes surface preparation activities and drying or curing time.
- (c) Liquid-to-uncaptured-gas protocol using a temporary total enclosure or building enclosure. The liquid-to-uncaptured-gas protocol compares the mass of liquid TVH in materials used in the coating operation to the mass of TVH emissions not captured by the emission capture system. Use a temporate total enclosure or a building enclosure and the procedures in paragraphs (c)(1) through (6) of this section to measure emission capture system efficiency using the liquid-to-uncaptured-gas protocol.
- (1) Either use a building enclosure or construct an enclosure around the coating operation where coatings, thinners, and cleaning materials are applied, and all areas where emissions from these applied coatings and materials subsequently occur, such as flash-off, curing, and drying areas. The areas of the coating operation where capture devices collect emissions for routing to an add-on cont

device, such as the entrance and exit areas of an oven or spray booth, must also be inside the enclosure. The enclosure must meet the applicable definition of a temporary total enclosure or buildi enclosure in Method 204 of appendix M to 40 CFR part 51.

- (2) Use Method 204A or 204F of appendix M to 40 CFR part 51 to determine the mass fraction, TVH per kg material, of TVH liquid input from each coating, thinner, and cleaning material used in the coating operation during each capture efficiency test run. To make the determination, substitute TVH each occurrence of the term VOC in the methods.
- (3) Use Equation 1 of this section to calculate the mass of TVH liquid input from all the coatings, thinners, and cleaning materials used in the coating operation during each capture efficiency test rur

$$TVH_{used} = \sum_{i=1}^{n} (TVH_{i})(Vol_{i})(D_{i})$$
(Eq. 1)

Where:

- TVH<sub>used</sub> = Mass of liquid total volatile hydrocarbons in materials used in the coating operation during the captu efficiency test run, lb.
- TVH<sub>i</sub> = Mass fraction of TVH in coating, thinner, or cleaning material, i, that is used in the coating operation dure the capture efficiency test run, kg TVH per kg material.
- Vol<sub>i</sub> = Total volume of coating, thinner, or cleaning material, i, used in the coating operation during the capture efficiency test run, liters.
- D<sub>i</sub> = Density of coating, thinner, or cleaning material, i, kg material per liter material.
- n = Number of different coatings, thinners, and cleaning materials used in the coating operation during the cap efficiency test run.
- (4) Use Method 204D or E of appendix M to 40 CFR part 51 to measure the total mass of TVH emissions that are not captured by the emission capture system; they are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.
  - (i) Use Method 204D if the enclosure is a temporary total enclosure.
- (ii) Use Method 204E if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, must be shut down, but all fans a blowers must be operating normally.
- (5) For each capture efficiency test run, determine the percent capture efficiency of the emissior capture system, using Equation 2 of this section:

$$CE = \frac{\left(TVH_{used} - TVH_{used}\right)}{TVH_{used}} \times 100$$
 (Eq. 2)

Where:

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent.

TVH<sub>used</sub> = Total mass of TVH liquid input used in the coating operation during the capture efficiency test run, ke

TVH<sub>uncaptured</sub> = Total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, kg.

- (6) Determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs.
- (d) Gas-to-gas protocol using a temporary total enclosure or a building enclosure. The gas-to-gaprotocol compares the mass of TVH emissions captured by the emission capture system to the mass TVH emissions not captured. Use a temporary total enclosure or a building enclosure and the procedures in paragraphs (d)(1) through (5) of this section to measure emission capture system efficiency using the gas-to-gas protocol.
- (1) Either use a building enclosure or construct an enclosure around the coating operation where coatings, thinners, and cleaning materials are applied, and all areas where emissions from these applied coatings and materials subsequently occur, such as flash-off, curing, and drying areas. The areas of the coating operation where capture devices collect emissions generated by the coating operation for routing to an add-on control device, such as the entrance and exit areas of an oven or a spray booth, must also be inside the enclosure. The enclosure must meet the applicable definition of temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR part 51.
- (2) Use Method 204B or 204C of appendix M to 40 CFR part 51 to measure the total mass of T\ emissions captured by the emission capture system during each capture efficiency test run as measured at the inlet to the add-on control device. To make the measurement, substitute TVH for ea occurrence of the term VOC in the methods.
- (i) The sampling points for the Method 204B or 204C measurement must be upstream from the add-on control device and must represent total emissions routed from the capture system and enterithe add-on control device.
- (ii) If multiple emission streams from the capture system enter the add-on control device without single common duct, then the emissions entering the add-on control device must be simultaneously measured in each duct and the total emissions entering the add-on control device must be determine
- (3) Use Method 204D or 204E of appendix M to 40 CFR part 51 to measure the total mass of T\ emissions that are not captured by the emission capture system; they are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.
  - (i) Use Method 204D if the enclosure is a temporary total enclosure.

- (ii) Use Method 204E if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, must be shut down, but all fans a blowers must be operating normally.
- (4) For each capture efficiency test run, determine the percent capture efficiency of the emissior capture system, using Equation 3 of this section:

$$CE = \frac{TVH_{captured}}{\left(TVH_{captured} + TVH_{uncaptured}\right)} \times 100$$
 (Eq. 3)

Where:

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent.

TVH<sub>captured</sub> = Total mass of TVH captured by the emission capture system as measured at the inlet to the add-control device during the emission capture efficiency test run, kg.

TVH<sub>uncaptured</sub> = Total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, kg.

- (5) Determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs.
- (e) Alternative capture efficiency protocol. As an alternative to the procedures specified in paragraphs (c) and (d) of this section, you may determine capture efficiency using any other capture efficiency protocol and test methods that satisfy the criteria of either the DQO or LCL approach as described in appendix A to subpart KK of this part.

## § 63.4965 How do I determine the add-on control device emission destruction or removal efficiency?

You must use the procedures and test methods in this section to determine the add-on control device emission destruction or removal efficiency as part of the performance test required by § 63.45 You must conduct three test runs as specified in § 63.7(e)(3), and each test run must last at least 1 hour.

- (a) For all types of add-on control devices, use the test methods specified in paragraphs (a)(1) through (5) of this section.
- (1) Use Method 1 or 1A of appendix A to 40 CFR part 60, as appropriate, to select sampling site and velocity traverse points.
- (2) Use Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.
- (3) Use Method 3, 3A, or 3B of appendix A to 40 CFR part 60, as appropriate, for gas analysis to determine dry molecular weight. You may also use as an alternative to Method 3B, the manual meth for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas in ANSI/ASI

PTC 19.10-1981, "Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus]" (incorporated by reference, see § 63.14).

- (4) Use Method 4 of appendix A to 40 CFR part 60 to determine stack gas moisture.
- (5) Methods for determining gas volumetric flow rate, dry molecular weight, and stack gas moist must be performed, as applicable, during each test run.
- (b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-c control device simultaneously, using either Method 25 or 25A of appendix A to 40 CFR part 60, as specified in paragraphs (b)(1) through (3) of this section. You must use the same method for both the inlet and outlet measurements.
- (1) Use Method 25 if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be more than 50 parts per million (ppm) at the control device outl
- (2) Use Method 25A if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be 50 ppm or less at the control device outlet.
  - (3) Use Method 25A if the add-on control device is not an oxidizer.
- (c) If two or more add-on control devices are used for the same emission stream, then you must measure emissions at the outlet of each device. For example, if one add-on control device is a concentrator with an outlet for the high-volume, dilute stream that has been treated by the concentra and a second add-on control device is an oxidizer with an outlet for the low-volume, concentrated stream that is treated with the oxidizer, you must measure emissions at the outlet of the oxidizer and the high volume dilute stream outlet of the concentrator.
- (d) For each test run, determine the total gaseous organic emissions mass flow rates for the inle and the outlet of the add-on control device, using Equation 1 of this section. If there is more than one inlet or outlet to the add-on control device, you must calculate the total gaseous organic mass flow re using Equation 1 of this section for each inlet and each outlet and then total all of the inlet emissions and total all of the outlet emissions.

$$M_f = Q_{sd}C_c(12)(0.0416)(10^{-6})$$
(Eq. 1)

Where:

 $M_f$  = Total gaseous organic emissions mass flow rate, kg/per hour (h).

- Q<sub>sd</sub> = Volumetric flow rate of gases entering or exiting the add-on control device, as determined by Method 2, 2 2C, 2D, 2F, or 2G, dry standard cubic meters/hour (dscm/h).
- C<sub>c</sub> = Concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 2 parts per million by volume (ppmv), dry basis.
- 0.0416 = Conversion factor for molar volume, kg-moles per cubic meter (mol/m³) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

(e) For each test run, determine the add-on control device organic emissions destruction or removal efficiency, using Equation 2 of this section:

$$DRE = \frac{M_{fi} - M_{fo}}{M_{fi}} \qquad (Eq. 2)$$

Where:

DRE = Organic emissions destruction or removal efficiency of the add-on control device, percent.

 $M_{fi}$  = Total gaseous organic emissions mass flow rate at the inlet(s) to the add-on control device, using Equatic of this section, kg/h.

M<sub>fo</sub> = Total gaseous organic emissions mass flow rate at the outlet(s) of the add-on control device, using Equa 1 of this section, kg/h.

(f) Determine the emission destruction or removal efficiency of the add-on control device as the average of the efficiencies determined in the three test runs and calculated in Equation 2 of this sect

## § 63.4966 How do I establish the emission capture system and add-on control device operatilimits during the performance test?

During the performance test required by § 63.4960 and described in §§ 63.4963, 63.4964, and 63.4965, you must establish the operating limits required by § 63.4892 according to this section, unk you have received approval for alternative monitoring and operating limits under § 63.8(f) as specifie § 63.4892.

- (a) *Thermal oxidizers*. If your add-on control device is a thermal oxidizer, establish the operating limits according to paragraphs (a)(1) and (2) of this section.
- (1) During the performance test, you must monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. You must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.
- (2) Use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperatis the minimum operating limit for your thermal oxidizer.
- (b) Catalytic oxidizers. If your add-on control device is a catalytic oxidizer, establish the operatin limits according to either paragraphs (b)(1) and (2) or paragraphs (b)(3) and (4) of this section.
- (1) During the performance test, you must monitor and record the temperature just before the catalyst bed and the temperature difference across the catalyst bed at least once every 15 minutes during each of the three test runs.
- (2) Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. These are the minimum operating limits for your catalyt

oxidizer.

- (3) As an alternative to monitoring the temperature difference across the catalyst bed, you may monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for your catalytic oxidizer as specified in paragraph (b)(4) of this section. During th performance test, you must monitor and record the temperature just before the catalyst bed at least once every 15 minutes during each of the three test runs. Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed during the performance test. This is the minimum operating limit for your catalytic oxidizer.
- (4) You must develop and implement an inspection and maintenance plan for your catalytic oxid (s) for which you elect to monitor according to paragraph (b)(3) of this section. The plan must addres at a minimum, the elements specified in paragraphs (b)(4)(i) through (iii) of this section.
- (i) Annual sampling and analysis of the catalyst activity ( *i.e.*, conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures.
- (ii) Monthly inspection of the oxidizer system, including the burner assembly and fuel supply line for problems and, as necessary, adjust the equipment to assure proper air-to-fuel mixtures.
- (iii) Annual internal and monthly external visual inspection of the catalyst bed to check for channeling, abrasion, and settling. If problems are found, you must replace the catalyst bed or take corrective action consistent with the manufacturer's recommendations and conduct a new performantest to determine destruction efficiency according to § 63.4965.
- (c) Carbon adsorbers. If your add-on control device is a carbon adsorber, establish the operating limits according to paragraphs (c)(1) and (2) of this section.
- (1) You must monitor and record the total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each regeneration cycle, and the carbon bed temperature after each carbon bed regeneration and cooling cycle, for the regeneration cycle either immediately preceding or immediate following the performance test.
- (2) The operating limits for your carbon adsorber are the minimum total desorbing gas mass flow recorded during the regeneration cycle and the maximum carbon bed temperature recorded after the cooling cycle.
- (d) Condensers. If your add-on control device is a condenser, establish the operating limits according to paragraphs (d)(1) and (2) of this section.
- (1) During the performance test, you must monitor and record the condenser outlet (product side gas temperature at least once every 15 minutes during each of the three test runs.
- (2) Use the data collected during the performance test to calculate and record the average condenser outlet (product side) gas temperature maintained during the performance test. This avera condenser outlet gas temperature is the maximum operating limit for your condenser.
- (e) Emission capture system. For each capture device that is not part of a PTE that meets the criteria of § 63.4964(a), establish an operating limit for either the gas volumetric flow rate or duct stat pressure, as specified in paragraphs (e)(1) and (2) of this section. The operating limit for a PTE is

specified in Table 1 to this subpart.

- (1) During the capture efficiency determination required by § 63.4960 and described in §§ 63.49 and 63.4964, you must monitor and record either the gas volumetric flow rate or the duct static press for each separate capture device in your emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the capture device and the add-on control device inlet.
- (2) Calculate and record the average gas volumetric flow rate or duct static pressure for the thre test runs for each capture device. This average gas volumetric flow rate or duct static pressure is the minimum operating limit for that specific capture device.
- (f) Concentrators. If your add-on control device includes a concentrator, you must establish operating limits for the concentrator according to paragraphs (f)(1) through (4) of this section.
- (1) During the performance test, you must monitor and record the desorption concentrate strean gas temperature at least once every 15 minutes during each of the three runs of the performance test
- (2) Use the data collected during the performance test to calculate and record the average temperature. This is the minimum operating limit for the desorption concentrate gas stream temperature.
- (3) During the performance test, you must monitor and record the pressure drop of the dilute stream across the concentrator at least once every 15 minutes during each of the three runs of the performance test.
- (4) Use the data collected during the performance test to calculate and record the average pressure drop. This is the maximum operating limit for the dilute stream across the concentrator.
- (g) *Bioreactors*. If you are using a bioreactor, you must comply with the provisions for the use of alternative monitoring method as set forth in 40 CFR 63.8(f).

# § 63.4967 What are the requirements for continuous parameter monitoring system installatic operation, and maintenance?

- (a) General. You must install, operate, and maintain each CPMS specified in paragraphs (c), (e) and (f) of this section according to paragraphs (a)(1) through (6) of this section. You must install, operate, and maintain each CPMS specified in paragraphs (b) and (d) of this section according to paragraphs (a)(3) through (5) of this section.
- (1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minuperiod. You must have a minimum of four equally spaced successive cycles of CPMS operation in 1 hour.
- (2) You must determine the average of all recorded readings for each 3-hour period of the emiss capture system and add-on control device operation.
  - (3) You must record the results of each inspection, calibration, and validation check of the CPM!

- (4) You must maintain the CPMS at all times and have available necessary parts for routine reprof the monitoring equipment.
- (5) You must operate the CPMS and collect emission capture system and add-on control device parameter data at all times that a controlled coating operation is operating, except during monitoring malfunctions, repairs to correct the monitor malfunctions, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments).
- (6) You must not use emission capture system or add-on control device parameter data recorde during monitoring malfunctions, repairs to correct the monitor malfunctions, out-of-control periods, or required quality assurance or control activities when calculating data averages. You must use all the data collected during all other periods in calculating the data averages for determining compliance w the emission capture system and add-on control device operating limits.
- (7) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the CPMS to provide valid data. Monitoring failures that are caused in part by poor maintenance or carel operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations is a deviation from the monitoring requirements.
- (b) Capture system bypass line. You must meet the requirements of paragraphs (b)(1) and (2) o this section for each emission capture system that contains bypass lines that could divert emissions away from the add-on control device to the atmosphere.
- (1) You must monitor or secure the valve or closure mechanism controlling the bypass line in a nondiverting position in such a way that the valve or closure mechanism cannot be opened without creating a record that the valve was opened. The method used to monitor or secure the valve or clos mechanism must meet one of the requirements specified in paragraphs (b)(1)(i) through (iv) of this section.
- (i) Flow control position indicator. Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that takes a reading at least once every minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. The time of occurrence and flow control position π be recorded, as well as every time the flow direction is changed. The flow control position indicator π be installed at the entrance to any bypass line that could divert the emissions away from the add-on control device to the atmosphere.
- (ii) Car-seal or lock-and-key valve closures. Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. You must visually inspect the seal or closure mechanism at least once every month to ensure that the valve is maintained in the closed position, a the emissions are not diverted away from the add-on control device to the atmosphere.
- (iii) Valve closure monitoring. Ensure that any bypass line valve is in the closed (nondiverting) position through monitoring of valve position at least once every 15 minutes. You must inspect the monitoring system at least once every month to verify that the monitor will indicate valve position.
- (iv) Automatic shutdown system. Use an automatic shutdown system in which the coating operation is stopped when flow is diverted by the bypass line away from the add-on control device to the atmosphere when the coating operation is running. You must inspect the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down the

coating operation.

- (2) If any bypass line is opened, you must include a description of why the bypass line was oper and the length of time it remained open in the semiannual compliance reports required in § 63.4920.
- (c) Thermal oxidizers and catalytic oxidizers. If you are using a thermal oxidizer or catalytic oxidi as an add-on control device (including those used with concentrators or with carbon adsorbers to tre desorbed concentrate streams), you must comply with the requirements in paragraphs (c)(1) through (3) of this section:
- (1) For a thermal oxidizer, install a gas temperature monitor in the firebox of the thermal oxidizer in the duct immediately downstream of the firebox before any substantial heat exchange occurs.
- (2) For a catalytic oxidizer, install a gas temperature monitor in the gas stream immediately befo the catalyst bed, and if you are establishing operating limits according to § 63.4966(b)(1) and (2), als install a gas temperature monitor in the gas stream immediately after the catalyst bed.
- (3) For each gas temperature monitoring device, you must meet the requirements in paragraphs and (c)(3)(i) through (vi) of this section for each gas temperature monitoring device.
  - (i) Locate the temperature sensor in a position that provides a representative temperature.
- (ii) Use a temperature sensor with an accuracy of at least 5 degrees Fahrenheit or 1.0 percent o the temperature value, whichever is larger.
  - (iii) Perform an initial calibration according to the manufacturer's requirements.
- (iv) Before using the sensor for the first time or upon relocation or replacement of the sensor, perform a validation check by comparing the sensor output to a calibrated temperature measuremen device or by comparing the sensor output to a simulated temperature.
- (v) Conduct an accuracy audit every quarter and after every 24 hour excursion. Accuracy audit methods include comparisons of sensor output to redundant temperature sensors, to calibrated temperature measurement devices, or to temperature simulation devices.
- (vi) Conduct a visual inspection of each sensor every quarter if redundant temperature sensors and used.
- (d) Carbon adsorbers. If you are using a carbon adsorber as an add-on control device, you must monitor the total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each regeneratic cycle, the carbon bed temperature after each regeneration and cooling cycle, and comply with paragraphs (a)(3) through (5) and (d)(1) through (3) of this section.
- (1) The regeneration desorbing gas mass flow monitor must be an integrating device having a measurement sensitivity of plus or minus 10 percent, capable of recording the total regeneration desorbing gas mass flow for each regeneration cycle.
- (2) The carbon bed temperature monitor must be capable of recording the temperature within 15 minutes of completing any carbon bed cooling cycle.

## § 63.4981 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in 40 CFR 63.2, and in this section as follow:

Add-on control means an air pollution control device such as a thermal oxidizer or carbon adsor that reduces pollution in an air stream by destruction or removal before discharge to the atmosphere

Adhesive means any chemical substance that is applied for the purpose of bonding two surfaces together.

Capture device means a hood, enclosure, room, floor sweep, or other means of containing or collecting emissions and directing those emissions into an add-on air pollution control device.

Capture efficiency or capture system efficiency means the portion (expressed as a percentage) the pollutants from an emission source that is delivered to an add-on control device.

Capture system means one or more capture devices intended to collect emissions generated by coating operation in the use of coatings or cleaning materials, both at the point of application and at subsequent points where emissions from the coatings and cleaning materials occur, such as flashoff drying, or curing. As used in this subpart, multiple capture devices that collect emissions generated to coating operation are considered a single capture system.

Cleaning material means a solvent used to remove contaminants and other materials, such as c grease, oil, and dried or wet coating (e.g., depainting), from a substrate before or after coating application or from equipment associated with a coating operation, such as spray booths, spray guns racks, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment a both.

Coating means a material applied to a substrate for decorative, protective, or functional purpose Such materials include, but are not limited to, paints, sealants, caulks, inks, adhesives, and maskant Decorative, protective, or functional materials that consist only of protective oils for metal, acids, base or any combination of these substances are not considered coatings for the purposes of this subpart

Coating operation means equipment used to apply cleaning materials to a substrate to prepare i for coating application or to remove dried or wet coating (surface preparation); to apply coating to a substrate (coating application) and to dry or cure the coating after application; and to clean coating operation equipment (equipment cleaning). A single coating operation may include any combination these types of equipment, but always includes at least the point at which a coating or cleaning mater is applied and all subsequent points in the affected source where organic HAP emissions from that coating or cleaning material occur. There may be multiple coating operations in an affected source. Coating application with hand-held nonrefillable aerosol containers, touchup markers, or marking per is not a coating operation for the purposes of this subpart.

Coating solids means the nonvolatile portion of the coating that makes up the dry film.

Continuous parameter monitoring system (CPMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, used to sample, condition (applicable), analyze, and provide a record of coating operation, or capture system, or add-on control device parameters.

Controlled coating operation means a coating operation from which some or all of the organic H. emissions are routed through an emission capture system and add-on control device.

Deviation means any instance in which an affected source subject to this subpart, or an owner c operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart including, but not limit to, any emission limit, or operating limit, or work practice standard;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement ir this subpart and that is included in the operating permit for any affected source required to obtain sur a permit; or
- (3) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is allowed by this subpart.

Emission limitation means an emission limit, operating limit, or work practice standard.

*Enclosure* means a structure that surrounds a source of emissions and captures and directs the emissions to an add-on control device.

Exempt compound means a specific compound that is not considered a VOC due to negligible photochemical reactivity. The exempt compounds are listed in 40 CFR 51.100(s).

Facility maintenance means the routine repair or renovation (including surface coating) of the toequipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity.

Manufacturer's formulation data means data on a material (such as a coating) that are supplied the material manufacturer based on knowledge of the ingredients used to manufacture that material, rather than based on testing of the material with the test methods specified in § 63.4941(a)(1) throug (3). Manufacturer's formulation data may include, but are not limited to, information on density, organ HAP content, volatile organic matter content, and coating solids content.

Mass fraction of coating solids means the ratio of the mass of coating solids to the mass of a coating in which it is contained, expressed as kg of coating solids per kg of coating.

Mass fraction of organic HAP means the ratio of the mass of organic HAP to the mass of a mate in which it is contained, expressed as kg of organic HAP per kg of material.

Month means a calendar month or a pre-specified period of 28 days to 35 days to allow for flexibility in recordkeeping when data are based on a business accounting period.

Organic HAP content means the mass of organic HAP per volume of coating solids for a coating calculated using Equation 2 of § 63.4941. The organic HAP content is determined for the coating in t condition it is in when received from its manufacturer or supplier and does not account for any alterarafter receipt.

- (3) For all carbon adsorbers, you must meet the requirements in paragraphs (c)(3)(i) through (vi this section for each gas temperature monitoring device.
- (e) Condensers. If you are using a condenser, you must monitor the condenser outlet (product side) gas temperature and comply with paragraphs (a) and (e)(1) and (2) of this section.
- (1) The temperature monitor must provide a gas temperature record at least once every 15 minutes.
- (2) For all condensers, you must meet the requirements in paragraphs (c)(3)(i) through (vi) of thi section for each gas temperature monitoring device.
- (f) Emission capture systems. The capture system monitoring system must comply with the applicable requirements in paragraphs (f)(1) and (2) of this section.
- (1) For each flow measurement device, you must meet the requirements in paragraphs (a) and (1)(i) through (vii) of this section.
- (i) Locate a flow sensor in a position that provides a representative flow measurement in the duc from each capture device in the emission capture system to the add-on control device.
  - (ii) Use a flow sensor with an accuracy of at least 10 percent of the flow.
  - (iii) Perform an initial sensor calibration in accordance with the manufacturer's requirements.
- (iv) Perform a validation check before initial use or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values with electronic signal simulations or via relative accuracy testing.
- (v) Perform accuracy audits every quarter and after every 24 hour excursion. Accuracy audits include comparison of sensor values with electronic signal simulations or with values obtained via relative accuracy testing.
  - (vi) Perform leak checks monthly.
  - (vii) Perform visual inspections of the sensor system quarterly if there is no redundant sensor.
- (2) For each pressure drop measurement device, you must comply with the requirements in paragraphs (a) and (f)(2)(i) through (vii) of this section.
- (i) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure drop across each opening you are monitoring.
- (ii) Use a pressure sensor with an accuracy of at least 0.5 inches of water column or 5 percent c the measured value, whichever is larger.
  - (iii) Perform an initial calibration of the sensor according to the manufacturer's requirements.
  - (iv) Conduct a validation check before initial operation or upon relocation or replacement of the

sensor. Validation checks include comparison of the sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.

- (v) Conduct accuracy audits every quarter and after every 24 hour excursion. Accuracy audits include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.
- (vi) Perform monthly leak checks on pressure connections. A pressure of at least 1.0 inches of water column to the connection must yield a stable sensor result for at least 15 seconds.
  - (vii) Perform a visual inspection of the sensor at least monthly if there is no redundant sensor.
- (g) Concentrators. If you are using a concentrator, such as a zeolite wheel or rotary carbon bed concentrator, you must comply with the requirements in paragraphs (a) and (g)(1) and (2) of this section.
- (1) You must install a temperature monitor in the desorption gas stream. The temperature monit must meet the requirements in paragraphs (a) and (c)(3) of this section.
- (2) You must install a device to monitor pressure drop across the zeolite wheel or rotary carbon bed. The pressure monitoring device must meet the requirements in paragraphs (a) and (f)(2) of this section.

## Other Requirements and Information

## § 63.4980 Who implements and enforces this subpart?

- (a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (EPA), or a delegated authority such as your State, local, or tribal agency. If the Administrate has delegated authority to your State, local, or tribal agency, then that agency (as well as EPA) has t authority to implement and enforce this subpart. You should contact your EPA Regional Office to fine out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agen-
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tragency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator 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 listed in paragraphs (c)(1) through (4) of this section:
  - (1) Approval of alternatives to the work practice standards in § 63.4893 under § 63.6(g).
- (2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f), and as defined it § 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 define § 63.90.

Permanent total enclosure (PTE) means a permanently installed enclosure that meets the criteri of Method 204 of appendix M, 40 CFR part 51, for a PTE and that directs all the exhaust gases from enclosure to an add-on control device.

Protective oil means an organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils.

Research or laboratory facility means a facility whose primary purpose is for research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and is not engaged in the manufacture of final or intermediate products for commercial purposes, except in a *de minimis* manner.

Responsible official means responsible official as defined in 40 CFR 70.2.

Startup, initial means the first time equipment is brought online in a facility.

Surface preparation means use of a cleaning material on a portion of or all of a substrate. This includes use of a cleaning material to remove dried coating, which is sometimes called "depainting" ( "paint stripping," for the purpose of preparing a substrate for coating application.

Temporary total enclosure means an enclosure constructed for the purpose of measuring the capture efficiency of pollutants emitted from a given source as defined in Method 204 of appendix M. CFR part 51.

Thinner means an organic solvent that is added to a coating after the coating is received from the supplier.

Total volatile hydrocarbon (TVH) means the total amount of nonaqueous volatile organic matter determined according to Methods 204 and 204A through 204F of appendix M to 40 CFR part 51 and substituting the term TVH each place in the methods where the term VOC is used. The TVH includes both VOC and non-VOC.

Uncontrolled coating operation means a coating operation from which none of the organic HAP emissions are routed through an emission capture system and add-on control device.

Volatile organic compound (VOC) means any compound defined as VOC in 40 CFR 51.100(s).

Volume fraction of coating solids means the ratio of the volume of coating solids (also known as volume of nonvolatiles) to the volume of coating, expressed as liters of coating solids per liter of coating.

Wastewater means water that is generated in a coating operation and is collected, stored, or treated prior to being discarded or discharged.

Table 1 to Subpart RRRR of Part 63—Operating Limits if Using the Emission Rate With Add-ol Controls Option

If you are required to comply with operating limits by § 63.4892, you must comply with the applicable operating limits in the following table:

For the following device	you must meet the following operating limit	and you must demonstrate continuous compliance with the operating limit by
1. thermal oxidizer	a. the average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to § 63.4966(a)	i. collecting the combustion temperature data according to § 63.4967(c); ii. reducing the data to 3-hour block averages; and iii. maintaining the 3-hour average combustior temperature at or above the temperature limit.
2. catalytic oxidizer	a. the average temperature measured just before the catalyst bed in any 3-hour period must not fall below the limit established according to § 63.4966(b); and either	i. collecting the temperature data according to § 63.4967(c); ii. reducing the data to 3-hour block averages; and iii. maintaining the 3-hour average temperatur before the catalyst bed at or above the temperature limit.
	b. ensure that the average temperature difference across the catalyst bed in any 3-hour period does not fall below the temperature difference limit established according to § 63.4966(b), or	<ul> <li>i. collecting the temperature data according to § 63.4967(c);</li> <li>ii. reducing the data to 3-hour block averages; and</li> <li>iii. maintaining the 3-hour average temperatur difference at or above the temperature difference limit.</li> </ul>
	c. develop and implement an inspection and maintenance plan according to § 63.4966(b)(3) and (4).	i. maintaining an up-to-date inspection and maintenance plan, records of annual catalyst activity checks, records of monthly inspections of the oxidizer system, and records of the annual internal inspections of the catalyst bed a problem is discovered during a monthly or annual inspection required by § 63.4966(b)(4) you must take corrective action as soon as practicable consistent with the manufacturer's recommendations.
3. carbon adsorber	a. the total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each carbon bed regeneration cycle must not fall below the total regeneration desorbing gas mass flow limit established according to § 63.4966(c)	i. measuring the total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for eac regeneration cycle according § 63.4967(d); ar ii. maintaining the total regeneration desorbing gas mass flow at or above the mass flow limit.
	b. the temperature of the carbon bed after completing each regeneration and any cooling cycle must not exceed the carbon bed temperature limit established according to	i. measuring the temperature of the carbon be after completing each regeneration and any cooling cycle according to § 63.4967(d); and ii. operating the carbon beds such that each carbon bed is not returned to service until completing each regeneration and any cooling

	§ 63.4966(c)	cycle until the recorded temperature of the carbon bed is at or below the temperature limi
4. condenser	a. the average condenser outlet (product side) gas temperature in any 3-hour period must not exceed the temperature limit established according to § 63.4966(d)	i. collecting the condenser outlet (product side gas temperature according to § 63.4967(e); ii. reducing the data to 3-hour block averages; and iii. maintaining the 3-hour average gas temperature at the outlet at or below the temperature limit.
5. emission capture system that is a PTE according to § 63.4964(a)	a. the direction of the air flow at all times must be into the enclosure; and either	i. collecting the direction of air flow, and either the facial velocity of air through all natural drappenings according to § 63.4967(f)(1) or the pressure drop across the enclosure according § 63.4967(f)(2); and ii. maintaining the facial velocity of air flow through all natural draft openings or the pressure drop at or above the facial velocity lile or pressure drop limit, and maintaining the direction of air flow into the enclosure at all times.
	b. the average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or	i. collecting the direction of air flow, and either the facial velocity of air through all natural drappenings according to § 63.4967(f)(1) or the pressure drop across the enclosure according § 63.4967(f)(2); and ii. maintaining the facial velocity of air flow through all natural draft openings or the pressure drop at or above the facial velocity lip or pressure drop limit, and maintaining the direction of air flow into the enclosure at all times.
	c. the pressure drop across the enclosure must be at least 0.007 inch H <sub>2</sub> O, as established in Method 204 of appendix M to 40 CFR part 51	i. collecting the direction of air flow, and either the facial velocity of air through all natural drar openings according to § 63.4967(f)(1) or the pressure drop across the enclosure according § 63.4967(f)(2); and ii. maintaining the facial velocity of air flow through all natural draft openings or the pressure drop at or above the facial velocity lil or pressure drop limit, and maintaining the direction of air flow into the enclosure at all times.
6. emission capture system that is not a PTE according to § 63.4964(a)	a. the average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that	i. collecting the gas volumetric flow rate or duct static pressure for each capture device according to § 63.4967(f); ii. reducing the data to 3-hour block averages; and iii. maintaining the 3-hour average gas volumetric flow rate or duct static pressure for each capture device at or above the gas

	capture device according to § 63.4966(e)	volumetric flow rate or duct static pressure lim
	a. the average gas temperature of the desorption concentrate stream in any 3-hour period must not fall below the limit established according to § 63.4966(f)	<ul> <li>i. collecting the temperature data according to § 63.4967(g);</li> <li>ii. reducing the data to 3-hour block averages;</li> <li>and</li> <li>iii. maintaining the 3-hour average temperatur at or above the temperature limit.</li> </ul>
	b. the average pressure drop of the dilute stream across the concentrator in any 3-hour period must not fall below the limit established according to § 63.4966(f)	i. collecting the pressure drop data according § 63.4967(g); ii. reducing the pressure drop data to 3-hour block averages; and iii. maintaining the 3-hour average pressure drop at or above the pressure drop
8. bioreactor systems	a. the use of an alternative monitoring method as set forth in § 63.8(f)	

Table 2 to Subpart RRRR of Part 63—Applicability of General Provisions to Subpart RRRR

You must comply with the applicable General Provisions requirements according to the following table:

Citation	Subject	Applicable to subpart	Explanation
§ 63.1(a) (1)-(14)	General Applicability	Yes.	
§ 63.1(b) (1)-(3)	Initial Applicability Determination	Yes	Applicability to subpart RRRR is also specified in § 63.4881.
§ 63.1(c) (1)	Applicability After Standard Established	Yes.	
§ 63.1(c) (2)-(3)	Applicability of Permit Program for Area Sources	No	Area sources are not subject to subp RRRR.
§ 63.1(c) (4)-(5)	Extensions and Notifications	Yes.	
§ 63.1(e)	Applicability of Permit Program Before Relevant Standard is Set	Yes.	
§ 63.2	Definitions	Yes	Additional definitions are specified in § 63.4981.
§ 63.3 (a)-(c)	Units and Abbreviations	Yes.	
§ 63.4(a) (1)-(5)	Prohibited Activities	Yes.	
§ 63.4 (b)-(c)	Circumvention/Severability	Yes.	
§ 63.5(a)	Construction/Reconstruction	Yes.	

§ 63.5(b) (1)-(6)	Requirements for Existing, Newly Constructed, and Reconstructed Sources	Yes.	
§ 63.5(d)	Application for Approval of Construction/Reconstruction	Yes.	
§ 63.5(e)	Approval of Construction/Reconstruction	Yes.	
§ 63.5(f)	Approval of Construction/Reconstruction Based on Prior State Review	Yes.	
§ 63.6(a)	Compliance With Standards and Maintenance Requirements— Applicability	Yes.	
§ 63.6(b) (1)-(7)	Compliance Dates for New and Reconstructed Sources	Yes	Section 63.4883 specifies the compliance dates.
§ 63.6(c) (1)-(5)	Compliance Dates for Existing Sources	Yes	Section 63.4883 specifies the compliance dates.
§ 63.6(e) (1)-(2)	Operation and Maintenance	Yes.	
§ 63.6(e) (3)	SSMP	Yes	Only sources using an add-on controdevice to comply with the standard must complete SSMP.
§ 63.6(f) (1)	Compliance Except During Startup, Shutdown, and Malfunction	Yes	Applies only to sources using an add on control device to comply with the standards.
§ 63.6(f) (2)-(3)	Methods for Determining Compliance	Yes.	
§ 63.6(g) (1)-(3)	Use of Alternative Standards	Yes.	
§ 63.6(h)	Compliance With Opacity/Visible Emission Standards	No	Subpart RRRR does not establish opacity standards and does not requ continuous opacity monitoring syster (COMS).
§ 63.6(i) (1)-(16)	Extension of Compliance	Yes.	
§ 63.6(j)	Presidential Compliance Exemption	Yes.	
§ 63.7(a) (1)	Performance Test Requirements— Applicability	Yes	Applies to all affected sources using add-on control device to comply with the standards. Additional requiremer for performance testing are specified §§ 63.4963, 63.4964, and 63.4965.
§ 63.7(a) (2)	Performance Test Requirements— Dates	Yes	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standards. Section 63.4960 specifies the schedule for performance test requirements that a

			earlier than those specified in § 63.7 (2).
§ 63.7(a) (3)	Performance Tests Required by the Administrator	Yes.	
§ 63.7 (b)-(e)	Performance Test Requirements— Notification, Quality Assurance, Facilities Necessary Safe Testing, Conditions During Test	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standards.
§ 63.7(f)	Performance Test Requirements— Use of Alternative Test Method	Yes	Applies to all test methods except those used to determine capture system efficiency.
§ 63.7 (g)-(h)	Performance Test Requirements— Data Analysis, Recordkeeping, Reporting, Waiver of Test	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standards.
§ 63.8(a) (1)-(3)	Monitoring Requirements— Applicability	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standards. Additiona requirements for monitoring are specified in § 63.4967.
§ 63.8(a) (4)	Additional Monitoring Requirements	No	Subpart RRRR does not have monitoring requirements for flares.
	Conduct of Monitoring	Yes.	
§ 63.8(c) (1)-(3)	<del> </del>	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standards. Additiona requirements for CMS operations an maintenance are specified in § 63.4967.
§ 63.8(c) (4)	CMS	No	Section 63.4967 specifies the requirements for the operation of CM for capture systems and add-on cont devices at sources using these to comply.
§ 63.8(c) (5)	COMS	No	Subpart RRRR does not have opacit or visible emissions standards.
§ 63.8(c) (6)	CMS Requirements	No	Section 63.4967 specifies the requirements for monitoring systems for capture systems and add-on cont devices at sources using these to comply.
§ 63.8(c) (7)	COS Out-of-Control Periods	Yes.	
§ 63.8(c) (8)	CMS Out-of-Control Periods Reporting	No	Section 63.4920 requires reporting o CMS out-of-control periods.

§ 63.8 (d)-(e)	Quality Control Program and CMS Performance Evaluation	No	Subpart RRRR does not require the use of continuous emissions monitoring systems.
§ 63.8(f) (1)-(5)	Use of an Alternative Monitoring Method	Yes.	
§ 63.8(f) (6)	Alternative to Relative Accuracy Test	No	Subpart RRRR does not require the use of continuous emissions monitoring systems.
§ 63.8(g) (1)-(5)	Data Reduction	No	Sections 63.4966 and 63.4967 speci monitoring data reduction.
§ 63.9 (a)-(d)	Notification Requirements	Yes.	
	Notification of Performance Test	Yes	Applies only to capture system and add-on control device performance tests at sources using these to comp with the standards.
§ 63.9(f)	Notification of Visible Emissions/Opacity Test	No	Subpart RRRR does not have opacit or visible emission standards.
§ 63.9(g) (1)-(3)	Additional Notifications When Using CMS	No	Subpart RRRR does not require the use of continuous emissions monitoring systems.
63.9(h)	Notification of Compliance Status	Yes	Section 63.4910 specifies the dates submitting the notification of compliance status.
§ 63.9(i)	Adjustment of Submittal Deadlines	Yes.	
§ 63.9(j)	Change in Previous Information	Yes.	
§ 63.10 (a)	Recordkeeping/Reporting— Applicability and General Information	Yes.	
§ 63.10 (b)(1)	General Recordkeeping Requirements	Yes	Additional requirements are specified in §§ 63.4930 and 63.4931.
§ 63.10 (b)(2)(i)- (v)	Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS	Yes	Requirements for Startup, Shutdown and Malfunction records only apply to add-on control devices used to compwith the standards.
§ 63.10 (b)(2)(vi)- (xi)		Yes.	
§ 63.10 (b)(2)(xii)	Records	Yes.	
§ 63.10 (b)(2) (xiii)		No	Subpart RRRR does not require the use of continuous emissions monitoring systems.
§ 63.10 (b)(2) (xiv)		Yes.	
§ 63.10	Recordkeeping Requirements for	Yes.	

(b)(3)	Applicability Determinations		
§ 63.10	Additional Recordkeeping	Yes.	
(c)(1)-(6)	Requirements for Sources with CMS		
§ 63.10 (c)(7)-(8)		No	The same records are required in § 63.4920(a)(7).
§ 63.10 (c)(9)- (15)		Yes.	
§ 63.10 (d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in § 63.4920.
§ 63.10 (d)(2)	Report of Performance Test Results	Yes	Additional requirements are specified in § 63.4920(b).
§ 63.10 (d)(3)	Reporting Opacity or Visible Emissions Observations	No	Subpart RRRR does not require opacity or visible emissions observations.
§ 63.10 (d)(4)	Progress Reports for Sources With Compliance Extensions	Yes.	
§ 63.10 (d)(5)	Startup, Shutdown, and Malfunction Reports	Yes	Applies only to add-on control device at sources using these to comply with the standards.
§ 63.10 (e)(1)-(2)	Additional CMS Reports	No	Subpart RRRR does not require the use of continuous emissions monitoring systems.
§ 63.10 (e)(3)	Excess Emissions/CMS Performance Reports	No	Section 63.4920(b) specifies the contents of periodic compliance reports.
§ 63.10 (e)(4)	COMS Data Reports	No	Subpart RRRR does not specify requirements for opacity or COMS.
§ 63.10 (f)	Recordkeeping/Reporting Waiver	Yes.	
§ 63.11	Control Device Requirements/Flares	No	Subpart RRRR does not specify use flares for compliance.
§ 63.12	State Authority and Delegations	Yes	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by Reference	Yes.	
§ 63.15	Availability of Information/Confidentiality	Yes.	

Table 3 to Subpart RRRR of Part 63—Default Organic HAP Mass Fraction for Solvents and Solvent Blends

You may use the mass fraction values in the following table for solvent blends for which you do have test data or manufacturer's formulation data:

			Typical organic HAP, percen
Solvent/Solvent blend	CAS. No.	fraction	by mass

1. Toluene	108-88-3	1.0	Toluene.
2. Xylene(s)	1330-20- 7	1.0	Xylenes, ethylbenzene.
3. Hexane	110-54-3	0.5	n-hexane.
4. n-Hexane	110-54-3	1.0	n-hexane.
5. Ethylbenzene	100-41-4	1.0	Ethylbenzene.
6. Aliphatic 140		0	None.
7. Aromatic 100		0.02	1% xylene, 1% cumene.
8. Aromatic 150		0.09	Naphthalene.
9. Aromatic naphtha	64742- 95-6		1% xylene, 1% cumene.
10. Aromatic solvent	64742- 94-5	0.1	Naphthalene.
11. Exempt mineral spirits	8032-32- 4	0	None.
12. Ligroines (VM & P)	8032-32- 4	0	None.
13. Lactol spirits	64742- 89-6	0.15	Toluene.
14. Low aromatic white spirit	64742- 82-1	0	None.
15. Mineral spirits	64742- 88-7	0.01	Xylenes.
16. Hydrotreated naphtha	64742- 48-9	0	None.
17. Hydrotreated light distillate	64742- 47-8	0.001	Toluene.
18. Stoddard solvent	8052-41- 3	0.01	Xylenes.
19. Super high-flash naphtha	64742- 95-6	0.05	Xylenes.
20. Varsol <sup>®</sup> solvent	8052-49- 3	0.01	0.5% xylenes, 0.5% ethyl benzene.
21. VM & P naphtha	64742- 89-8	0.06	3% toluene, 3% xylene.
22. Petroleum distillate mixture	68477- 31-6	0.08	4% naphthalene, 4% biphenyl.

Table 4 to Subpart RRRR of Part 63—Default Organic HAP Mass Fraction for Petroleum Solve Groups <sup>1</sup>

You May Use the Mass Fraction Values in the Following Fable for Solvent Blends for Which You Do Not Have Test Data or Manufacturer's Formulation Data:

Solvent type	Average organic HAP mass fraction	Typical organic percent HAP, by mass
Aliphatic <sup>2</sup>	0.03	1% Xylene, 1% Toluene, and 1% Ethylbenzer
Aromatic <sup>3</sup>	0.06	4% Xylene, 1% Toluene, and 1% Ethylbenzer

<sup>&</sup>lt;sup>1</sup> Use this table only if the solvent blend does not match any of the solvent blends in Table 3 to t subpart and you only know whether the blend is aliphatic or aromatic.

<sup>&</sup>lt;sup>2</sup> E.g., Mineral Spirits 135, Mineral Spirits 150 EC, Naphtha, Mixed Hydrocarbon, Aliphatic Hydrocarbon, Aliphatic Naphtha, Naphthol Spirits, Petroleum Spirits, Petroleum Oil, Petroleum Naphtha, Solvent Naphtha, Solvent Blend.

<sup>&</sup>lt;sup>3</sup> E.g., Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.

Correll, Inc.

Permit #: 0814-AOP-R5

AFIN: 24-00057

Appendix B: NESHAP 40 CFR Part 63 Subpart ZZZZ

# ELECTRONIC CODE OF FEDERAL REGULATIONS

# e-CFR Data is current as of October 25, 2012

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR

SOURCE CATEGORIES (CONTINUED)

# Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutan for Stationary Reciprocating Internal Combustion Engines

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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 a 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 demonstra 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 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 comheat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE 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 sit HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 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 sourc 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 CF part 1068, subpart C.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008]

# § 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 majo 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 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 loca at a major source of HAP emissions is new if you commenced construction of the stationary RICE 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 Jt 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 brak 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 t 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 o the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements 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 c

more than 500 brake HP located at a major source of HAP emissions.

- (ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating c 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 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 the 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 th 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 major source of HAP emissions;
- (iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions;
- (v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major soul 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;
  - (vi) Existing residential emergency stationary RICE located at an area source of HAP emissions
- (vii) Existing commercial emergency stationary RICE located at an area source of HAP emissior or
  - (viii) Existing institutional emergency stationary RICE located at an area source of HAP emission
- (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 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 I 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 th 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 the 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]

# § 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-emerge 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 and operating limitations no late 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, you must comply with th applicable emission limitations and operating limitations 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 and operating limitations no late 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 t 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 equation 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 equation 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must compare to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must compare to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must compare to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must compare to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must compare to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must compare to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must compare to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must compare to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must compare to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must compare to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must compare to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must compare to 500 brake HP located at a major source of HAP emissions at the first part of the first part

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 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 wl your area source becomes a major source of HAP must be in compliance with this subpart upon star 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 the 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]

#### **Emission and Operating Limitations**

§ 63.6600 What emission limitations and operating limitations must I meet if I own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAF 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 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 stational 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 a

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 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 mor 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 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 locate 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 must I meet if I own or operate an existing stationary RI 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 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.

[75 FR 51589, Aug. 20, 2010]

§ 63.6603 What emission limitations and operating limitations must I meet if I own or operate 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 emission

you must comply with the requirements in Table 2d to this subpart and the operating limitations Table 1b and Table 2b to this subpart that apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the Federal Aid Highway System (FAHS you do not have to meet the numerical CO emission limitations specified in Table 2d to this subpart. Existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the FAHS must meet the management practices that are shown for stational non-emergency CI RICE less than or equal to 300 HP in Table 2d to this subpart.

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011]

# § 63.6604 What fuel requirements must I meet if I own or operate an existing stationary CI RICE?

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 die fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fu Existing non-emergency CI stationary RICE located in Guam, American Samoa, the Commonwealth the Northern Mariana Islands, or at area sources in areas of Alaska not accessible by the FAHS are exempt from the requirements of this section.

[75 FR 51589, Aug. 20, 2010]

# **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 and operating limitations in this subtract 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 a 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 usefull 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]

#### **Testing and Initial Compliance Requirements**

§ 63.6610 By what date must I conduct the initial performance tests or other initial compliant 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 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 latthan 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 wh 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 performance test has been previously conducted, but the test must meet all of the conditions describ 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 owithout 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 compliant 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 majo 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 th is specified for your stationary RICE in § 63.6595 and according to the provisions specified in Table 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 compliant demonstrations if I own or operate an existing stationary RICE with a site rating of less than c 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 assource 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 da 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 performance test has been previously conducted, but the test must meet all of the conditions describ 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 owithout 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 to when the engine is started up again.
  - (c) [Reserved]
  - (d) You must conduct three separate test runs for each performance test required in this section

specified in § 63.7(e)(3). Each test run must last at least 1 hour.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reductive requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 1)}$$

Where:

C<sub>i</sub> = concentration of CO or formaldehyde at the control device inlet,

Co = concentration of CO or formaldehyde at the control device outlet, and

R = percent reduction of CO or formaldehyde emissions.

- (2) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet a outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO<sub>2</sub>). If pollutant concentrations are to be corrected to 15 percent oxygen and CO<sub>2</sub> concentration is measured in lieu of oxygen concentration measurement, a CO<sub>2</sub> correction factor is needed. Calculate the CO<sub>2</sub> correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.
- (i) Calculate the fuel-specific  $F_0$  value for the fuel burned during the test using values obtained fr Method 19, section 5.2, and the following equation:

$$F_{o} = \frac{0.209 \, F_{d}}{F_{c}}$$
 (Eq. 2)

Where:

F<sub>o</sub> = Fuel factor based on the ratio of oxygen volume to the ultimate CO<sub>2</sub> 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, dsm<sup>3</sup> /J (dscf/10<sup>6</sup> Btu).

F<sub>c</sub> = Ratio of the volume of CO<sub>2</sub> produced to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup> /J (dscf<sub>i</sub> Btu).

(ii) Calculate the CO<sub>2</sub> correction factor for correcting measurement data to 15 percent oxygen, a follows:

$$X_{co_2} = \frac{5.9}{F_*}$$
 (Eq. 3)

Where:

 $X_{co2} = CO_2$  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<sub>X</sub> and SO<sub>2</sub> gas concentrations adjusted to 15 percent O<sub>2</sub> using CO<sub>2</sub> as follo

$$C_{adj} = C_d \frac{X_{co_2}}{\% CO_2}$$
 (Eq. 4)

Where:

%CO<sub>2</sub> = Measured CO<sub>2</sub> 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 t 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 h HAP emissions change with changes in these parameters, and how limitations on these parameters serve to limit HAP emissions;
- (3) A discussion of how you will establish the upper and/or lower values for these parameters 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 us 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 or

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 an 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 a specific application. A written report of the average percent load determination must be included in 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, an 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]

# § 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 oxygen or CO<sub>2</sub> at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of this section.
- (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 auc (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 operations (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at letwo 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 millic or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivaler CO<sub>2</sub> concentration.
- (b) If you are required to install a continuous parameter monitoring system (CPMS) as specified Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (5) of this section. For an affected source that is complyin with the emission limitations and operating limitations on March 9, 2011, the requirements in paragra (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)( 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)( 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 minimur 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 digeste gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor a record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fu 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 rati 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 th stationary RICE and after-treatment control device (if any) according to the manufacturer's emissionrelated 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 c HAP emissions;
- (2) An existing emergency or black start stationary RICE with a site rating of less than or equal t 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 HAP emissions;
- (6) An existing non-emergency, non-black start landfill or digester gas stationary RICE located a an area source of HAP emissions;
- (7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than 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 that 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 calen year; and
- (10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greate than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calen 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 weither paragraph (g)(1) or paragraph (g)(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 not accessible by the FAHS do not hat to meet the requirements of paragraph (g) of this section.
- (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 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 perce water content. The condemning limits for these parameters are as follows: Total Base Number is lesthan 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by m than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is great 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 chan the oil within 2 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 days of 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 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 Ta 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: Tot Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Tot 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 th oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days receiving the results of the analysis; if the engine is not in operation when the results of the analysis received, the engine owner or operator must change the oil within 2 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]

# § 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?

- (a) You must demonstrate initial compliance with each emission and operating limitation 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.

#### **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 dat 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 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 and operating limitations?

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation 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 operatir 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) [Reserved]

- (d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operatir limitations that occur during the first 200 hours of operation from engine startup (engine burn-in peric are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that terr 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 si rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new 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, ar 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 opera 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 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) Requirements for emergency stationary RICE. (1) 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, a new or reconstructed emergency stationary RICE with a site rating of more than 5 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, o an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of the section. Any operation other than emergency operation, maintenance and testing, and operation in n emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.
  - (i) There is no time limit on the use of emergency stationary RICE in emergency situations.
- (ii) You may operate your emergency stationary RICE for the purpose of maintenance checks at readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance check and readiness testing of such units is limited to 100 hours per year. The owner or operator may petiti

the Administrator for approval of additional hours to be used for maintenance checks and readin testing, but a petition is not required if the owner or operator maintains records indicating that Federa State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

- (iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergence situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or generate income for a facility to supply power to an electric grid or otherwise supply power as part of financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergen condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of dema response operation are counted as part of the 50 hours of operation per year provided for nonemergency situations. The supply of emergency power to another entity or entities pursuant to finance arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.
- (2) If you own or operate an emergency stationary RICE with a site rating of more than 500 brak HP located at a major source of HAP emissions that was installed prior to June 12, 2006, you must operate the engine according to the conditions described in paragraphs (f)(2)(i) through (iii) of this section. If you do not operate the engine according to the requirements in paragraphs (f)(2)(i) throug (iii) of this section, the engine will not be considered an emergency engine under this subpart and wi need to meet all requirements for non-emergency engines.
  - (i) There is no time limit on the use of emergency stationary RICE in emergency situations.
- (ii) You may operate your emergency stationary RICE for the purpose of maintenance checks ar readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, there is no time limit on the use of emergency stationary RICE in emergency situations and for routir testing and maintenance.
- (iii) You may operate your emergency stationary RICE for an additional 50 hours per year in nor emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply po as part of a financial arrangement with another entity.

[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]

#### 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 following;
- (1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located 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 25 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 tha 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, y 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 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 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 no 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 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 additiona 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 sourc 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 c 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 subme 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)

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010]

# § 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 June 30 or December 31, whichever date is the first date following the end of the first calendar half a 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 hal 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 postmark or delivered no later than July 31 or January 31, whichever date is the first date following the end of semiannual reporting period.
- (5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 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 accord 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 the compliance date that is specified for your affected source in § 63.6595 and ending on December
- (7) For annual Compliance reports, the first Compliance report must be postmarked or delivered 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 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 reportir period.
- (6) If there were no periods during which the continuous monitoring system (CMS), including CE 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 th 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 71 must report all deviations as defined in this subpart in the semiannual monitoring report required I 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance repursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report require by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all require 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 per 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 paragrapl (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 m also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivale 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.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010]

# § 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, includir 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 cor 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) 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. (d)(3).
- (3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in § 63 (f)(6)(i), if applicable.
- (c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digeste 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 complianc 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 devic (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) or (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 operat including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operat as part of demand response.
- (1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake F 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 doe 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]

#### § 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 accordin 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 eaccurrence, 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 ap 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 4S engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructe 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 comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLE stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfil 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 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  $\varsigma$  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 subpit is delegated to your State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tr agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section ar 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 define § 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:

Area source means any stationary source of HAP that is not a major source as defined in part 6:

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 a equipment from the well bore to the point of custody transfer, except glycol dehydration units, storagivessels with potential for flash emissions, combustion turbines, and stationary RICE.

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 commer 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 no spark ignition engine.

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and treatment in the producing operations, or from storage vessels or automatic transfer facilities or othe 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 c operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart, including but not limit to any emission limitation or operating limitation;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement ir this subpart and that is included in the operating permit for any affected source required to obtain sur a permit; or
- (3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction regardless or 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 th 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 fue also includes any non-distillate fuel with comparable physical and chemical properties (e.g. biodiese that is suitable for use in compression ignition engines.

Digester gas means any gaseous by-product of wastewater treatment typically formed through t anaerobic decomposition of organic waste materials and composed principally of methane and CO<sub>2</sub>

Dual-fuel engine means any stationary RICE in which a liquid fuel (typically diesel fuel) is used f compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

Emergency stationary RICE means any stationary internal combustion engine whose operation limited to emergency situations and required testing and maintenance. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions a facility) when electric power from the local utility (or the normal power source, if the facility runs on own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flo etc. Stationary RICE used for peak shaving are not considered emergency stationary RICE. Stationa RICE used to supply power to an electric grid or that supply non-emergency power as part of a finan arrangement with another entity are not considered to be emergency engines, except as permitted under § 63.6640(f). 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.

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 cranksha revolutions, with intake and compression strokes in the first revolution and power and exhaust stroke 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, 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 stre and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbater 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) c the CAA.

Institutional emergency stationary RICE means an emergency stationary RICE used in institution establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishment 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 methan

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 no 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 (a 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 tha are not part of the same oil and gas production facility, as defined in § 63.1271 of subpart HHH of thi part, shall not be aggregated;
- (3) For production field facilities, only HAP emissions from glycol dehydration units, storage vest 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  $\xi$  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 pollutio 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 for 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 $_{\rm X}$ ) condevice for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO $_{\rm X}$ , CO, and volatile organic compounds (VOC) into CO $_{\rm 2}$ , 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 m 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 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 n 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 batterie 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 dema 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 it physical and operational design. Any physical or operational limitation on the capacity of the stationa 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 possible of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil an atural 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 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  $C_3 H_8$ .

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 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<sub>X</sub> (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 wit 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 diese 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 any which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-recengine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used so for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart PPPP or 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 lite and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annuaverage hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emission occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduc

Subpart means 40 CFR part 63, subpart ZZZZ.

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 crankshal 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 rulean 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]

Table 1 a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE > 500 HP Located at a Major Source of H

#### **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 stationary RICE	a. Reduce formaldehyde emissions by 76 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	Minimize the engine's time spent at idle and minimize the engine's startup time a startup to a period needed for appropria and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>1</sup>
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub>	

<sup>&</sup>lt;sup>1</sup>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 1 b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed Spark Ignition 4SRB Stationary RICE >500 HP Located at a Major Source of HA Emissions and Existing Spark Ignition 4SRB Stationary RICE >500 HP Located at an Area **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 and existing 4SRB stationary RICE >500 HP located at an area sour of HAP emissions that operate more than 24 hours per calendar year:

For each	You must meet the following operating limitation
1. 4SRB stationary RICE 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 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O2 and using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of	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 greate than or equal to 750 °F and less than or equal to 1250 F.

formaldehyde in the stationary RICE exhaust to 2.7 ppmvd or less at 15 percent O2 and using NSCR.	
2. 4SRB stationary RICE 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 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O2 and not using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd or less at 15 percent O2 and not using NSCR.	Comply with any operating limitations approved by the Administrator.

[76 FR 12867, Mar. 9, 2011]

Table 2 a 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 fo new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE a 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 <sub>2</sub> . 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 <sub>2</sub> until June 15, 2007	Minimize the engine's time spent at idle and minimize the engine's startu time at startup to a period needed fo appropriate and safe loading of the engine, not to exceed 30 minutes, at which time the non-startup emission limitations apply. <sup>1</sup>
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 <sub>2</sub>	
3. CI	a. Reduce CO emissions by 70 percent or more;	

stationary RICE	or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O <sub>2</sub>	

<sup>&</sup>lt;sup>1</sup> Sources 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 2 b to Subpart ZZZZ of Part 63— Operating Limitations for New and Reconstructed 2SL and Compression Ignition 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 HAP Emissions, Existing Compression Ignition Stationary RICE >500 HP, and Existing 4SLB Stationary RICE >500 HP Located at an Area Source of HAP Emissions

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 compression ignition stationary RICE located at a major source of HAP emissions; new and reconstructed 4SLB stationary RICE ≥2! HP located at a major source of HAP emissions; existing compression ignition stationary RICE >500 HP; and existing 4SLB stationary RICE >500 HP located at an area source of HAP emissions that operate more than 24 hours per calendar year:

For each	You must meet the following operating limitation
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst	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 th 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 1350 °F.1
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst	Comply with any operating limitation approved by the Administrator.

<sup>1</sup> Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.

[75 FR 51593, Aug. 20, 2010, as amended at 76 FR 12867, Mar. 9, 2011]

Table 2 c 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 ≤ 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 requirement for existing compression ignition stationary RICE located at a major source of HAP emissions and existing spark ignition stationary RICE ≤ 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
Emergency stationary CI RICE and black start stationary CI RICE.	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>2</sup> b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as	Minimize the engine's time spent at idle a 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. <sup>3</sup>
2. Non-Emergency, non- black start stationary CI RICE < 100 HP	necessary. <sup>3</sup> a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first: <sup>2</sup>	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
3. Non-Emergency, non- black start CI stationary RICE 100 ≤ HP ≤ 300 HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O <sub>2</sub>	
4. Non-Emergency, non-	a. Limit concentration of CO	

black start CI stationary RICE 300 < HP ≤ 500	in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O <sub>2</sub> ; or	
	b. Reduce CO emissions by 70 percent or more.	
5. Non-Emergency, non- black start stationary CI RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O <sub>2</sub> ; or	
	b. Reduce CO emissions by 70 percent or more.	
6. Emergency stationary SI RICE and black start stationary SI RICE. <sup>1</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>2</sup>	
	b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
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; <sup>2</sup>	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
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; <sup>2</sup>	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts	

	every 4,320 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
9. Non-emergency, non- black start 2SLB stationary RICE 100 ≤ HP ≤ 500	Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O <sub>2</sub>	
10. Non-emergency, non- black start 4SLB stationary RICE 100 ≤ HP ≤ 500	Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd or less at 15 percent O <sub>2</sub>	
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 <sub>2</sub>	
12. Non-emergency, non- black start landfill or digester gas-fired stationary RICE 100 ≤ HP ≤ 500	Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O <sub>2</sub>	

<sup>&</sup>lt;sup>1</sup> If an emergency engine is operating during an emergency and it is not possible to shut down t 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 t risk was deemed unacceptable.

[75 FR 51593, Aug. 20, 2010]

#### Table 2 d 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 exist stationary RICE located at area sources of HAP emissions:

<sup>&</sup>lt;sup>2</sup> Sources have the option to utilize an oil analysis program as described in § 63,6625(i) in order extend the specified oil change requirement in Table 2c of this subpart.

<sup>&</sup>lt;sup>3</sup> Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

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, whichever comes first; <sup>1</sup>	Minimize the engine's time sper at idle and minimize the engine startup time at startup to a perioneeded for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
2. Non-Emergency, non-black start CI stationary RICE 300 <hp≤ 500<="" td=""><td><ul> <li>a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O<sub>2</sub>; or</li> </ul></td><td></td></hp≤>	<ul> <li>a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O<sub>2</sub>; or</li> </ul>	
	<ul> <li>b. Reduce CO emissions by 70 percent or more.</li> </ul>	
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 <sub>2</sub> ; or	
	<ul> <li>b. Reduce CO emissions by 70 percent or more.</li> </ul>	
4. Emergency stationary CI RICE and black start stationary CI RICE. <sup>2</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; 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. <sup>2</sup>	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 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	
	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; <sup>1</sup>	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; 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 stationary RICE > 500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd at 15 percent O <sub>2</sub> ; or	
	b. Reduce CO emissions by 93 percent or more.	
9. 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; <sup>1</sup>	
·	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
10. Non-emergency, non-black start 4SRB stationary RICE > 500 HP	a. Limit concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd at 15 percent O <sub>2</sub> ; or	
	b. Reduce formaldehyde emissions by 76 percent or more.	
11. Non-emergency, non-black start landfill or digester gas-fired stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as	

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necessary.	

<sup>&</sup>lt;sup>1</sup> Sources have the option to utilize an oil analysis program as described in § 63.6625(i) in order extend the specified oil change requirement in Table 2d of this subpart.

[75 FR 51595, Aug. 20, 2010]

#### 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 performar test requirements:

For each	Complying with the requirement to	You must
1. New or reconstructed 2SLB stationary RICE with a brake horsepower > 500 located at major sources; new or reconstructed 4SLB stationary RICE with a brake horsepower ≥ 250 located at major sources; and new or reconstructed CI stationary RICE with a brake horsepower > 500 located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually. <sup>1</sup>
<ul><li>2. 4SRB stationary RICE with a brake horsepower</li><li>≥ 5,000 located at major sources</li></ul>	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually. <sup>1</sup>
3. Stationary RICE with a brake horsepower > 500 located at major sources and new or reconstructed 4SLB stationary RICE with a brake horsepower 250 ≤ HP ≤ 500 located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually. <sup>1</sup>
4. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower > 500 that are not limited use stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower > 500 that are operated more than 24 hours per calendar year that are not limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs. or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower > 500 that are limited use		Conduct subsequent performance tests

<sup>&</sup>lt;sup>2</sup> If 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 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 delay 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 of the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower > 500 that are operated more than 24 hours per calendar year and are limited use stationary RICE		every 8,760 hrs. or 5 years, whichever comes first.
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<sup>&</sup>lt;sup>1</sup> After 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 semiannuperformance tests.

[75 FR 51596, Aug. 20, 2010]

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

As stated in §§ 63.6610, 63.6611, 63.6612, 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. Measure the O <sub>2</sub> at the inlet and outlet of the control device; and	(1) Portable CO and O <sub>2</sub> analyzer	(a) Using ASTM D6522- 00 (2005) <sup>a</sup> (incorporated by reference, see § 63.14). Measurements to determine O <sub>2</sub> must be
				made at the same time the measurements for C concentration.
		ii. Measure the CO at the inlet and the outlet of the control device	(1) Portable CO and O <sub>2</sub> analyzer	(a) Using ASTM D6522.  00 (2005) <sup>a b</sup> (incorporat by reference, see § 63.' or Method 10 of 40 CFF appendix A. The CO concentration must be \$\alpha\$ 15 percent O <sub>2</sub> , dry basis
2. 4SRB stationary RICE	a. Reduce formaldehyde emissions	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A § 63.7(d)(1)(i)	(a) Sampling sites must be located at the inlet a outlet of the control device.
		ii. Measure O <sub>2</sub> at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00m (2005)	(a) Measurements to determine O <sub>2</sub> concentration must b made at the same time

				the measurements for formaldehyde 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, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. 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, cprovided 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 a 15 percent O <sub>2</sub> , dry basis Results of this test cons of the average of the thit 1-hour or longer runs.
3. Stationary RICE	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	location and the number of traverse	(1) Method 1 or 1A of 40 CFR part 60, appendix A § 63.7(d)(1)(i)	(a) If using a control device, the sampling sitmust be located at the outlet of the control device.
		ii. Determine the O <sub>2</sub> concentration of the stationary RICE	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM	(a) Measurements to determine O <sub>2</sub> concentration must b
		exhaust at the sampling port location; and	Method D6522-00 (2005)	made at the same time and location as the measurements for formaldehyde concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03, <sup>c</sup> provided in ASTM D6348-03 Annex A5 (Analyte Spiking	(a) Formaldehyde concentration must be a 15 percent O <sub>2</sub> , dry basis Results of this test cons of the average of the thi

	Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	1-hour or longer runs.
v. Measure CO at the exhaust of the stationary RICE	(2005), aMethod 320 of	(a) CO Concentration must be at 15 percent C dry basis. Results of this test consist of the avera of the three 1-hour long runs.

<sup>&</sup>lt;sup>a</sup> You may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain 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. ASTM-D6522-00 (2005) may t used to test both CI and SI stationary RICE.

[75 FR 51597, Aug. 20, 2010]

## Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations and Operat Limitations

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 initi 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, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year		i. The average reduction of emissions of CO determined from the initial performance te achieves the required CO percent reduction; and ii. You have installed a CPMS continuously monitor catalyst inlet temperature according to the requirements in § 63.6625 (b); and iii. You have recorded the catalyst pressure drop and

<sup>&</sup>lt;sup>b</sup> You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03.

<sup>&</sup>lt;sup>c</sup> You 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.

2. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	concentration of CO, using oxidation catalyst, and using a CPMS	catalyst inlet temperature during the initial performance test.  i. The average CO concentrating determined from the initial performance test is less than concentrating to the CO emission limitation; and iii. You have installed a CPMS 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, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year		i. The average reduction of emissions of CO determined from the initial performance te achieves the required CO percent reduction; and ii. You have installed a CPMS continuously monitor operating parameters approved by the Administrator (if any) accordin to the requirements in § 63.66 (b); and iii. You have recorded the approved operating parameter (if any) during the initial performance test.
4. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	concentration of CO, and not using oxidation catalyst	i. The average CO concentrati determined from the initial performance test is less than cequal to the CO emission limitation; and ii. You have installed a CPMS continuously monitor operating parameters approved by the Administrator (if any) accordin to the requirements in § 63.66 (b); and iii. You have recorded the approved operating parameter (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	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS continuously monitor CO and either O <sub>2</sub> or CO <sub>2</sub> at both the inleased outlet of the oxidation

located at a major source of HAP, non- emergency stationary CI RICE >500 HP located at a major source of HAP, existing non- emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year		catalyst according to the requirements in § 63.6625(a); and ii. You have conducted a performance evaluation of you CEMS using PS 3 and 4A of 4 CFR part 60, appendix B; and iii. The average reduction of C calculated using § 63.6620 equals or exceeds the requirement reduction. The initial to comprises the first 4-hour periafter successful validation of the CEMS. Compliance is based of 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, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	concentration of CO, and using a CEMS	i. You have installed a CEMS continuously monitor CO and either O <sub>2</sub> or CO <sub>2</sub> at the outlet of the oxidation catalyst according to the requirements in § 63.66 (a); and iii. You have conducted a performance evaluation of you CEMS using PS 3 and 4A of 4 CFR part 60, appendix B; and iii. The average concentration
		CO calculated using § 63.6620 is less than or equal to the CC emission limitation. The initial test comprises the first 4-hour period after successful validati 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, and existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	formaldehyde emissions and	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to orgreater than the required formaldehyde percent reductic and ii. You have installed a CPMS 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, and existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	formaldehyde emissions and not	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to orgreater than the required formaldehyde percent reductic and ii. You have installed a CPMS continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.66 (b); and
		iii. You have recorded the approved operating parameter (if any) during the initial performance test.
9. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Limit the concentration of formaldehyde and not using NSCR	i. The average formaldehyde concentration determined from the initial performance test is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS continuously monitor operating parameters approved by the Administrator (if any) accordin to the requirements in § 63.66 (b); and
		iii. You have recorded the approved operating parameter (if any) 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≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP	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 <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS 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 duri the initial performance test.
11. 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≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS continuously monitor operating parameters approved by the Administrator (if any) accordin to the requirements in § 63.66 (b); and
		iii. You have recorded the approved operating parameter (if any) during the initial performance test.
12. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300 <hp≤500 an="" area="" at="" hap<="" located="" of="" source="" td=""><td>a. Reduce CO or formaldehyde emissions</td><td>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 of formaldehyde, as applicable, percent reduction.</td></hp≤500>	a. Reduce CO or formaldehyde 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 of formaldehyde, as applicable, percent reduction.
13. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300 <hp≤500 an="" area<br="" at="" located="">source of HAP</hp≤500>	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde c CO concentration, as applicab corrected to 15 percent O <sub>2</sub> , dr basis, from the three test runs less than or equal to the formaldehyde or CO emission limitation, as applicable.

[76 FR 12867, Mar. 9, 2011]

# Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

As stated in § 63.6640, you must continuously comply with the emissions and operating limitatio and work or management practices as required by the following:

For each		You must demonstrate continuous compliance by
New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-	emissions and using	i. Conducting semiannual performance tests for CO demonstrate that the

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	catalyst, and using a CPMS	required CO percent reduction is achieved; <sup>a</sup> and ii. Collecting the catalyst in temperature data accordin to § 63.6625(b); and iii. Reducing these data to 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-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 not using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO t demonstrate that the required CO percent reduction is achieved; <sup>a</sup> anc ii. Collecting the approved operating parameter (if any data according to § 63.662 (b); and iii. Reducing these data to hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the 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, new or reconstructed non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP, existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS	i. Collecting the monitoring data according to § 63.662 (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

calendar year		required percent reduction CO emissions over the 4-hour averaging period, or that the emission remain a or below the CO concentration limit; and iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR pa 60, appendix B, as well as daily and periodic data quality checks in accordan with 40 CFR part 60, appendix F, procedure 1.
4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. Collecting the catalyst inl temperature data accordin to § 63.6625(b); and
		ii. Reducing these data to hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		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 § 63.662 (b); and ii. Reducing these data to 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. <sup>a</sup>
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	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or bel the formaldehyde
	NSCR	concentration limit; <sup>a</sup> and ii. Collecting the catalyst in temperature data accordin to § 63.6625(b); and
		iii. Reducing these data to 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 ≤HP≤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 bel the formaldehyde concentration limit; <sup>a</sup> and ii. Collecting the approved operating parameter (if any data according to § 63.662 (b); and
		iii. Reducing these data to 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 landfill or digester gas stationary SI RICE located at an area source of HAP, 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 24 hours or less per calendar year		i. Operating and maintainir the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; ii. Develop and follow your own maintenance plan whi 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.
10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE, and existing 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE	a. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or years, whichever comes fir for CO or formaldehyde, as appropriate, to demonstrat that the required CO or formaldehyde, as appropriate, percent reduction is achieved or th your emissions remain at a below the CO or formaldehyde concentratio limit; and
		ii. Collecting the catalyst in temperature data accordin to § 63.6625(b); and
		iii. Reducing these data to 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

	1	performance test.
11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE, and existing 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE	a. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and not using oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or years, whichever comes fir for CO or formaldehyde, as appropriate, to demonstrat that the required CO or formaldehyde, as appropriate, percent reduction is achieved or th your emissions remain at c below the CO or formaldehyde concentratio limit; and
		ii. Collecting the approved operating parameter (if any data according to § 63.662 (b); and
		iii. Reducing these data to 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 and existing limited use 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year	a. Reduce CO or formaldehyde emissions or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using an oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or years, whichever comes fir for CO or formaldehyde, as appropriate, to demonstrat that the required CO or formaldehyde, as appropriate, percent reduction is achieved or th your emissions remain at c below the CO or formaldehyde concentratio limit; and
		ii. Collecting the catalyst in temperature data accordin to § 63.6625(b); and
		iii. Reducing these data to 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 and existing limited use 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year	a. Reduce CO or formaldehyde emissions or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and not using an oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or years, whichever comes fir for CO or formaldehyde, as appropriate, to demonstrat that the required CO or formaldehyde, as appropriate, percent reduction is achieved or th your emissions remain at c below the CO or formaldehyde concentratio limit; and
		ii. Collecting the approved operating parameter (if any data according to § 63.662 (b); and
		iii. Reducing these data to hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

<sup>&</sup>lt;sup>a</sup> After 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 semiannuperformance tests.

[76 FR 12870, Mar. 9, 2011]

#### 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:

	You must	The report must	You must subr
For each	submit a	contain	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; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE > 500 HP located at an area source of HAP and operated more than 24 hours per calendar year; 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	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 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 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)(1)(5) for engines that are not limit 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. i. Semiannually according to the requirements in § 63.6650(b). 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 b. The operating limits provided in your federally	i. Annually, according to the requirements in § 63.6650.

enforceable permit, and any deviations from these limits; and	
c. Any problems or errors i. See item 2 suspected with the meters.	<u>2</u> .a.i

[75 FR 51603, Aug. 20, 2010]

### 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)-	Use of alternate standard	Yes.	

(3)	1		
§ 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 § 63.664
§ 63.7(b)(2)	Notification of rescheduling	Yes	Except that § 63.7(b)(2) only applies as specified in § 63.664
§ 63.7(c)	Quality assurance/test plan	Yes	Except that § 63.7(c) only appli 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 and reduction of data	Yes	Subpart ZZZZ specifies test 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	Yes.	
§ 63.8(c)(1) (ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§ 63.8(c)(1) (iii)	Compliance with operation and maintenance requirements	Yes.	
§ 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), whic 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 § 63.664
§ 63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that § 63.8(f)(6) only applies as specified in § 63.664
§ 63.8(g)	Data reduction	Yes	Except that provisions for COM 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 appli as specified in § 63.6645.
§ 63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that § 63.9(d) only appli as specified in § 63.6645.
§ 63.9(e)	Notification of performance test	Yes	Except that § 63.9(e) only appli 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 applias 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. (h)(4) is reserved.		
			Except that § 63.9(h) only appl 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.			
§ 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) ar (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) 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.	

[75 FR 9688, Mar. 3, 2010]

### **CERTIFICATE OF SERVICE**

I, Pam Owen, hereby certify that a copy of this	permit has been m	ailed by first class mai	il to
Correll, Inc., P.O. Box 417, Charleston, AR, 72	2933, on this	10th	day
of January	, 2013.		
·	Day	Owen	
	Pam Owen, AAII	, Air Division	