

RESPONSE TO COMMENTS

Arkansas Terminaling and Trading Permit No.: 590-AOP-R11 AFIN: 60-00440

On October 11, 2007, 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, the facility submitted written comments, data, views, or arguments on the draft permitting decision. The Department's response to these issues is as follows:

Comment #1

Page 6, Process Description – The last sentence in the first paragraph should read “Biodiesel is delivered by truck and loaded into the above ground storage tanks.”

Response to Comment #1

Accepted. The draft document has been revised accordingly.

Comment #2

Page 6, Process Description – The second sentence in the third paragraph should read, “Free phase hydrocarbons are removed and transferred to product tanks.”

Response to Comment #2

Accepted. The draft document has been revised accordingly.

Comment #3

Page 7, Table 3, Emission summary – The lb/hr total allowable HAP Emissions for Toluene and Ethyl Benzene should be 0.12 lb/hr and 0.02 lb/hr, respectively (based on the summation of the rounded individual source limits).

Response to Comment #3

Accepted. The draft document has been revised accordingly.

Comment #4

Page 10, Last Paragraph, Second Sentence – “Tank #9” should be revised to “Tank #19”

Response to Comment #4

Accepted. The typographical error in the draft document has been corrected.

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Comment #5

Page 30, Plantwide Condition #16 – The first sentence should read, “The permittee may change the service of Tanks #2, #3, #5, and/or #8 from gasoline to a lower vapor pressure product at the discretion of the facility.”

Response to Comment #5

Accepted. The draft document has been revised accordingly.

Comment #6

Page 20, Loading Rack Source Description – The third sentence should read, “The loading racks have five lanes and 28 loading arms.”

Response to Comment #6

Accepted. The draft document has been revised accordingly.

Comment #7

Arkansas Terminaling and Trading proposes to install three 20,000 gallon ethanol storage tanks. The total VOC emission from these tanks is less than 1.5 tpy. Therefore, these tanks should be listed in the insignificant activities list.

Response to Comment #7

Accepted. The draft document has been revised accordingly.

ADEQ OPERATING AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation No. 26:

Permit No. : 590-AOP-R11

Renewal #1

IS ISSUED TO:

Arkansas Terminaling and Trading

North Little Rock, AR 72117

Pulaski County


AFIN: 60-00440

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:

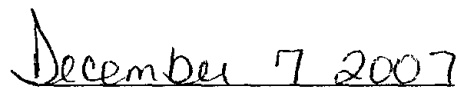
April 19, 2004 AND April 18, 2009

IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:



Mike Bates, Chief
Air Division



Date Modified

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Table 1 - List of Acronyms

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 _x	Nitrogen Oxide
PM	Particulate matter
PM ₁₀	Particulate matter smaller than ten microns
SNAP	Significant New Alternatives Program (SNAP)
SO ₂	Sulfur dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Ton per year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

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Section I: FACILITY INFORMATION

PERMITTEE: Arkansas Terminaling and Trading

AFIN: 60-00440

PERMIT NUMBER: 590-AOP-R11

FACILITY ADDRESS: 2207 Central Airport Road
North Little Rock, AR 72117

MAILING ADDRESS: 701 South Robison Road
Texarkana, TX 75504

COUNTY: Pulaski County

CONTACT POSITION: Rick Shingleur, Environmental Manager

TELEPHONE NUMBER: 903-794-3835

REVIEWING ENGINEER: Charles Hurt

UTM Zone: 15

UTM North - South (Y): 3847967.45

UTM East - West (X): 575270.69

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Section II: INTRODUCTION

Summary of Permit Activity

Arkansas Terminaling and Trading (ATT) operates a bulk gasoline terminal located at 2207 Central Airport Road, North Little Rock, Pulaski County, Arkansas 72117. ATT proposed revised VOC, CO, NO_x, and HAP emission estimates which are based on standard industry factors for gasoline and testing. ATT did not propose any increase in fuel throughput. Two insignificant activities, a 550 gallon red dye tank and a 4,000 gallon gasoline additive tank, were proposed. ATT also requested restricting Tank #6 (SN-13) and Tank #7 (SN-14) to store only jet fuel and Tank #9 (SN-17) to store only diesel fuel. Permitted CO and NO_x emissions increased by 0.9 tpy and 0.2 tpy, respectively. Permitted VOC emissions which also includes HAP emissions decreased by 77.7 tpy.

Process Description

Gasoline, diesel, and jet naphtha fuel are delivered to the facility via pipeline. Upon delivery to the terminal, each product is bottom fed into bulk liquid fuel storage tanks. The above ground storage tanks are used to store gasoline, diesel, and jet naphtha. Biodiesel is delivered by truck and loaded into above ground storage tanks.

The petroleum products are pumped from the storage tanks to the loading racks through above ground piping. At the loading racks, the petroleum products are bottom filled into tank trucks. The off gases are routed to the flare for incineration.

The oil/water separators process petroleum products that are spilled at the loading rack and rain water. Free phase hydrocarbons are removed and transferred to product tanks. The water is discharged outside the berm through an outfall.

Regulations

The following table contains the regulations applicable to this permit.

Table 2 – Regulations

Source No.	Regulation Citations
Facility	Regulation #18, <i>Arkansas Air Pollution Control Code</i>
Facility	Regulation #19, <i>Regulations of the Arkansas Plan of Implementation for Air Pollution Control, (Including Chapter 10)</i>
Facility	Regulation #26, <i>Regulation of the Arkansas Operating Air Permit Program</i>
Facility	40 CFR Part 60, Subpart Ka- <i>Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984</i>
Facility	40 CFR Part 60, Subpart Kb- <i>Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984</i>

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Source No.	Regulation Citations
Facility	40 CFR Part 60, Subpart XX- <i>Standards of Performance for Bulk Gasoline Terminals.</i>

The following table is a summary of emissions from the facility. The following table contains cross-references to the pages containing specific conditions and emissions for each source. This table, in itself, is not an enforceable condition of the permit.

Table 3 – Emission Summary

EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
Total Allowable Emissions		VOC	78.3	89.4	N/A
		CO	20.8	18.8	
		NO _x	3.8	3.5	
Total Allowable HAP Emissions*		Benzene	0.09	0.22	N/A
		Toluene	0.12	0.29	
		Ethyl Benzene	0.02	0.03	
		Xylene	0.06	0.15	
		Hexane	0.26	0.67	
		2,2,4 - Trimethylpentane	0.07	0.17	
01, 04, 17	Tanks #1, #4 and #9 (Diesel Fuel Only)	VOC	6.9	1.2	11
13, 14	Tanks #6 and #7 (Jet Fuel Only)	VOC	0.2	0.2	12
02, 03, 05, 16	Tanks #2, #3, #5, and #8 (RVP 13 gasoline or lower vapor pressure products)	VOC	5.0	21.2	13
		Benzene	0.04	0.16	
		Toluene	0.05	0.21	
		Ethyl Benzene	0.01	0.02	
		Xylene	0.02	0.11	
		Hexane	0.11	0.50	
11	Loading Racks (98% efficient flare)	VOC	62.8	65.9	20
		CO	20.8	18.8	
		NO _x	3.8	3.5	
		Benzene	0.05	0.05	
		Toluene	0.07	0.07	
		Ethyl Benzene	0.01	0.01	
		Xylene	0.04	0.04	
		Hexane	0.15	0.16	
		2,2,4 - Trimethylpentane	0.04	0.04	
18, 19	Tanks #18 and #19 (Bio-Diesel Only)	VOC	3.2	0.1	27
--	Fugitive Emissions	VOC	0.2	0.8	26

* HAPs are included in the VOC totals.

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Section III: PERMIT HISTORY

Permit #590-A was issued in 1980. It permitted the usage of three gasoline storage tanks, one diesel storage tank, and one truck loading rack.

Permit #590-AR-1 was issued in March 1985 to install a second truck loading rack and an 80,000 barrel gasoline storage tank.

Permit #590-AR-2 was issued in 1988 in order to document several sources installed in 1985, but not listed in the permit.

Permit #590-AR-3 was issued in March 1990 for the installation and operation of a 45,000 bbl internal floating roof tank for the storage of gasoline, a 45,000 bbl cone roof tank for the storage of diesel oil, four 12,000 gallon cone roof tanks for the storage of ethanol, and one alcohol loading rack.

Permit #590-AR-4 was issued in September 1992 to allow the facility to install and operate an air stripper. The air stripper was installed and began operation in January 1993 as part of a treatment system for tank bottom water, which contains hydrocarbons.

Permit #590-AR-5 was issued in January 1994 to correct discrepancies between actual equipment located at the facility and equipment listed in previous permits.

Permit #590-AR-6 was issued in October 1994 to document the addition of two bulk fuel storage tanks, to adjust the allowable emission rates for facility fugitive equipment leaks, and to adjust the allowable throughput and material vapor pressure for three existing storage tanks.

Permit #590-AOP-R0 was issued on August 17, 1999, as the first operating air permit for this facility under the requirements of Regulation #26 (Title V). Under this permit, the allowable fuel throughput at the facility was increased and HAP emissions were quantified.

Permit #590-AOP-R1 was issued on March 16, 2000 as a part of the appeal resolution between the Department and the facility. In the resolution, the facility has determined a bottleneck of 170.5 mgal/hr for the loading rack based on three loading lanes. It was determined that the facility had not triggered the requirements of 40 CFR Part 63, Subpart R-National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations); therefore, the compliance plan was removed from the permit. Additionally, the oil/water separator was reclassified as an insignificant source. HAP concentration tables and testing requirements have been added to the Plantwide Conditions to demonstrate compliance with the HAP emissions at the facility.

Permit #590-AOP-R2 was issued on May 6, 2002 and allowed the facility to change the seal on Tank #6 from two seals mounted one above the other to a mechanical shoe seal, and to pre-approve changing Tank #7 to a mechanical shoe seal should its primary/secondary seals begin to deteriorate. Total increase in VOC emissions will be less than 0.1 tons per year.

According to Plantwide Condition #9, the facility, upon demonstration that it is in compliance

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with Plantwide Conditions #7 and #8, may petition the Department for less frequent gasoline sampling requirements. The facility has demonstrated full compliance with these conditions. As of Permit #590-AOP-R2, the facility shall only be required to sample the gasoline once every twelve months.

Permit #590-AOP-R3 was issued on December 6, 2002 and allowed the facility to increase diesel throughput to 175,000,000 gallons per year. Tank #1 (SN-01), Tank #4 (SN-04), and the East and West Loading Racks with a flare (SN-11) will be affected by the new throughput limit. Total increase in emissions will be 0.2 tons per year of VOC and 0.3 tons per year of NO_x.

Permit #590-AOP-R4 was issued on June 26, 2003. The modification allowed the facility to construct two 80,000 barrel (3,360,000 gallon) tanks to store gasoline or lower vapor pressure products, add an additional fueling lane with six additional loading arms, increase hourly loading rack throughput to 210 mgal/hr, update the maximum allowable liquid concentration of benzene based on 210 mgal/hr for the maximum flow rate at the loading rack Plantwide Condition #7, increase VOC and HAP fugitive emissions due to the increase in the number of valves, flanges and pump seals from the installation of the new equipment, and update hourly and annual facility-wide VOC and HAP emission rates due to decreasing the permitted concentration of benzene in the fuel by 20%, or to 5,600 mg Benzene/kg of fuel.

With the issuance of #590-AOP-R4 ATT's petroleum fuel storage capacity exceeded 300,000 bbl. Since the facility is also over 100 tpy for VOC it is now one of the 28 listed sources and is classified as a PSD major source for VOC.

Permit #590-AOP-R5 was issued April 19, 2004. The permit was the first Title V Renewal issued to ATT. The renewal included modifications to allow the facility to increase annual throughput of jet fuel by 75,000,000 gal, increase VOC and HAP fugitive emissions due to the increase in the number of valves, flanges, and pump seals from the installation of new equipment, install a second oil/water separator (insignificant activity), and make a change in the types of fuel stored in SN-13, SN-14, and SN-16. The emissions associated with the modifications are less than 0.01 lb/hr and 1.05 tpy of VOC. Annual diesel and gasoline throughputs will not change at the loading rack. Tank #6 (SN-13) and Tank #7 (SN-14) are now used to store jet fuel. Tank #8 (SN-16) is now used to store diesel fuel. The changes in service for these tanks were made in accordance with Plantwide Condition #19. When Permit #590-AOP-R4 was issued, ATT was approved to install a new loading lane and additional loading arms at the existing loading rack. After the permit was issued, ATT discovered some of the underground piping could be damaged by traffic on the proposed loading lane. The proposed loading lane and arms were installed at a separate location at the facility, adjacent to Tank #8 and Tank #9.

Permit #590-AOP-R6 was issued on August 2, 2005. The modification allowed the facility to increase the annual gasoline throughput from 410,000,000 gallons to 450,000,000 gallons; route gasoline through the recently installed loading lanes; increase the hourly loading rate from 210,000 gal/hr to 215,000 gal/hr; increase the number of pump seals from 50 to 90; and reduce the maximum allowable benzene concentration in the gasoline from 5,600 mg/kg to 5,000 mg/kg. The emissions increase associated with the modifications for VOC, CO, NO_x, and HAPs were 12.1 tpy, 1.6 tpy, 0.3 tpy, and 0.30 tpy, respectively. ATT's is classified as a PSD Major Source

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because its petroleum storage capacity exceeds 300,000 bbls, and its VOC emissions exceed 100 tpy. PSD review was not triggered because there was no significant increase for any pollutant.

Permit #590-AOP-R7 was issued on January 26, 2006. This modification allowed the replacement of the existing Tank #2 seal system with a mechanical shoe seal as allowed under 40 CFR Part 60 (NSPS) Subpart Ka. The replacement resulted in a permitted emission increase of 2.8 tons per year of VOC.

Permit #590-AOP-R8 was issued on August 16, 2006. This modification increased diesel throughput and granted the installation of a 20,000 gallon vertical fixed roof tank.

Permit #590-AOP-R9 was issued on January 10, 2007. This modification allowed an increase in annual bio-diesel throughput from 120,000 gallons to 980,000 gallons. This permit action grants a VOC increase to Tank #18. Therefore, this permit action grants a net VOC increase to Tank #18. Therefore, this permit action grants a net VOC increase of 0.1 tons of VOC per year.

Permit #590-AOP-R10 was issued on March 19, 2007. This modification allowed the installation of Tank #19, a 20,000 gallon vertical fixed roof bio-diesel storage tank (SN-19). Permitted VOC increased by 0.1 tpy.

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Section IV: SPECIFIC CONDITIONS

SN-01, SN-04, and SN-17

Tank #1, Tank #4, and Tank #9 (Diesel Only)

Description

Tank #1 (SN-01) is a 1,111,911 gallon internal floating roof tank with a liquid-mounted primary seal. It was installed in 1980.

Tank #4 (SN-04) is a 1,899,110 gallon fixed roof tank. It was installed in 1980.

Tank #9 (SN-17) is 3,360,000 gallon internal floating roof tank with a mechanical shoe seal. It was installed in 2003.

Pursuant to 40 CFR 60, Subpart Ka-*Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984*, Tanks #1 and #4 are not affected sources because they contain diesel (#2 fuel oil) which is specifically excluded from the requirements of a petroleum liquid.

Pursuant to 40 CFR 60, Subpart Kb-*Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*, Tank #9 is not an affected source because the capacity of the tank exceeds 151 m³ (39,890 gal) and the maximum true vapor pressure of the tank contents is less than 3.5 kPa (0.51 psia).

Specific Conditions

1. The permit allows the following maximum emission rates. The permittee shall demonstrate compliance with this condition through compliance with Plantwide Condition #10. [Regulation No. 19 §19.501 *et seq.* effective July 15, 2007, and 40 CFR Part 52, Subpart E]

Table 4 – Tanks #1, #4, and #9 Maximum Criteria Emission Rates

SN	Pollutant	lb/hr	tpy
01	VOC	0.1	---
04	VOC	6.7	---
17	VOC	0.1	---
Total	VOC	6.9	1.2

2. Tanks #1, #4, and #9 shall be used only for the storage of diesel fuel (#2 fuel oil). [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

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SN-13 and SN-14

Tank #6 and Tank #7 (Jet Fuel Only)

Description

Tank #6 (SN-13) is a 1,799,559 gallon internal floating roof tank with a mechanical shoe seal. It was installed in 1994.

Tank #7 (SN-14) is a 402,381 gallon internal floating roof tank with a primary and secondary seal. The current seal configuration may be changed to a mechanical shoe seal. It was installed in 1994.

Pursuant to 40 CFR 60, Subpart Kb-*Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*, Tank #6 and Tank #7 are not affected sources because the capacity of the tank exceeds 151 m³ (39,890 gal) and the maximum true vapor pressure of the tank contents is less than 3.5 kPa (0.51 psia).

Specific Conditions

3. The permit allows the following maximum emission rates. The permittee shall demonstrate compliance with this condition through compliance with Plantwide Condition #14. [Regulation No. 19 §19.501 *et seq.* effective July 15, 2007, and 40 CFR Part 52, Subpart E]

Table 5 – Tanks #6 and #7 Maximum Criteria Emission Rates

SN	Pollutant	lb/hr	tpy
13	VOC	0.1	---
14	VOC	0.1	---
Total	VOC	0.2	0.2

4. Tanks #6 and #7 shall be used only for the storage of jet fuel. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

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SN-02, SN-03, SN-05, and SN-16

Tanks #2, #3, #5, and #8 (RVP 13 Gasoline or Lower Vapor Pressure)

Description

Tank #2 (SN-02) is a 1,996,056 gallon internal floating roof tank with mechanical shoe seal as allowed in NSPS Subpart Ka. The tank was installed in 1980 and the seal was replaced in 2005.

Tank #3 (SN-03) is a 1,997,053 gallon internal floating roof tank with a liquid-mounted primary seal. It was installed in 1980.

Tank #5 (SN-05) is a 3,365,080 gallon internal floating roof tank with a mechanical shoe seal. It was installed in 1985.

Tank #8 (SN-16) is a 3,360,000 gallon internal floating roof tank with a mechanical shoe. It was installed in 2003.

Pursuant to 40 CFR 60, Subpart Ka-*Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984*, Tanks #2 and #3 are affected sources. Pursuant to 40 CFR 60, Subpart Kb-*Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*, Tank #5 and Tank #8 are affected sources. Applicable requirements are outlined in the following specific conditions.

Specific Conditions

5. These sources shall not exceed the emission rates set forth in the following table. Compliance with these emission limits shall be demonstrated by compliance with Plantwide Condition #12. [Regulation No. 19 §19.501 *et seq.* effective July 15, 2007, and 40 CFR Part 52, Subpart E]

Table 6 – Gasoline Tanks Maximum Criteria Pollutant Emission Rates

SN	Pollutant	lb/hr	tpy
02	VOC	1.5	---
03	VOC	0.9	---
05	VOC	1.3	---
16	VOC	1.3	---
Total		5.0	21.2

6. These sources shall not exceed the emission rates set forth in the following table. Compliance with these emission limits shall be demonstrated by compliance with Plantwide Condition #12. [Regulation No. 18 §18.801, effective February 15, 1999, and A.C.A §8-4-203 as referenced by §8-4-304 and §8-4-311]

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Table 7 – Gasoline Tanks Maximum Non-criteria Pollutant Emission Rates

SN	Pollutant	lb/hr	tpy
02	Benzene	0.011	---
	Toluene	0.015	---
	Ethyl Benzene	0.002	---
	Xylene	0.008	---
	Hexane	0.035	---
	2,2,4-Trimethylpentane	0.009	---
03	Benzene	0.007	---
	Toluene	0.009	---
	Ethyl Benzene	0.001	---
	Xylene	0.004	---
	Hexane	0.020	---
	2,2,4-Trimethylpentane	0.005	---
05	Benzene	0.009	---
	Toluene	0.012	---
	Ethyl Benzene	0.001	---
	Xylene	0.006	---
	Hexane	0.029	---
	2,2,4-Trimethylpentane	0.008	---
16	Benzene	0.009	---
	Toluene	0.012	---
	Ethyl Benzene	0.001	---
	Xylene	0.006	---
	Hexane	0.029	---
	2,2,4-Trimethylpentane	0.008	---
Total	Benzene	0.04	0.16
	Toluene	0.05	0.21
	Ethyl Benzene	0.01	0.02
	Xylene	0.02	0.11
	Hexane	0.11	0.50
	2,2,4-Trimethylpentane	0.03	0.13

7. Tanks #2, #3, #5, and #8 shall be used only for the storage of RVP 13 gasoline or lower vapor pressure products. [Regulation No. 18 §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

8. The facility is subject to the malfunctions, breakdowns, and upset conditions of the Regulations for the Control of Volatile Organic Compounds in Pulaski County of Regulation #19, Chapter 10. Emissions in excess of these Regulations which are temporary and result solely from a sudden and unavoidable breakdown, malfunction or upset of process or emission control equipment, or sudden and unavoidable upset of operation will not be considered a violation of these Regulations provided: [Regulation No. 19 §19.1004 (H)(1)]

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- a. The owner or operator notifies the Department of any such occurrence by the end of the next business day of the occurrence; and
 - b. the owner or operator demonstrates to the Director that the suggested period of time for correction is as expeditious as practicable; and
 - c. the breakdown or upset is determined by the Director to be unavoidable and not the result of negligence; and
 - d. within five (5) days after the beginning of the occurrence, a written report is submitted to the Director which includes the cause and nature of the event, estimated quantity of volatile organic compounds emitted, time of emission and to prevent recurrence; and
 - e. the Director is immediately notified when corrective measures have been accomplished.
9. The gasoline delivery vessels at the facility shall be loaded through bottom loading. [Regulation No. 19 §19.1005 (A)(1) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
10. The petroleum liquid storage tanks at the facility used for the storage of volatile organic compounds having a capacity greater than or equal to 150,000 liters have been equipped to meet the equipment requirements of §19.1005 (B)(1)(c). [Regulation No. 19 §19.1005 (B)(1) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
11. All seals necessary to meet the conditions of §19.1005 (B)(1)(b) and (c) shall be maintained in good operating condition. [Regulation No. 19 §19.1005 (B)(2) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
12. All openings, except stub drains and those related to safety, are to be sealed with suitable closures when not in use. [Regulation No. 19 §19.1005 (B)(3) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
13. Tanks #2 and #3 are affected sources of 40 CFR Part 60, Subpart Ka. Applicable provisions include, but are not limited to the following: [Regulation 19 §19.304 and 40 CFR Part 60, Subpart Ka]
- a. Tanks #2 and #3 are equipped with an internal floating roof. In accordance with this section, the tank cover is to be floating at all times except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Each opening in the cover except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. Each opening in the cover except for automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped with a cover, seal, or lid which is to be maintained in a closed position

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- at all times except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the cover is floating except when the cover is being floated off or is being landed on the leg supports. Rim vents are to be set to open when the cover is being floated off the leg supports or at the manufacturer's recommended setting. [40 CFR Part 60 §60.112a (a)(2)]
- b. The facility shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period. In accordance with §60.115a (b), available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR Part 60 §60.115a (a)]
14. Tanks #5 and #8 are affected sources of 40 CFR Part 60, Subpart Kb. Applicable provisions include, but are not limited to the following: [Regulation No. 19 §19.304 and 40 CFR Part 60, Subpart Kb]
- a. Tanks #5 and #8 shall be equipped with a fixed roof in combination with an internal floating roof equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof meeting the following specifications: [40 CFR Part 60 §60.112b (a)(1)]
- i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
- ii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
- iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by the braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- b. The internal floating roof shall rest or float on the liquid surface at all times except during initial fill and during those intervals when the tank is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. [40 CFR Part 60 §60.112b (a)(1)(i)]

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- c. Each opening in a non-contact internal floating roof except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. [40 CFR Part 60 §60.112b (a)(1)(iii)]
- d. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [40 CFR Part 60 §60.112b (a)(1)(iv)]
- e. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [40 CFR Part 60 §60.112b (a)(1)(v)]
- f. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [40 CFR Part 60 §60.112b (a)(1)(vi)]
- g. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening. [40 CFR Part 60 §60.112b (a)(1)(vii)]
- h. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. [40 CFR Part 60 §60.112b (a)(1)(viii)]
- i. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR Part 60 §60.112b (a)(1)(ix)]
- j. The facility shall visibly inspect the internal floating roof and the primary seal prior to filling the tank with VOL. If there are holes, tears, or other openings in the primary seal or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the tank. [40 CFR Part 60 §60.113b (a)(1)]
- k. For tanks with a mechanical shoe seal, the facility shall visibly inspect the internal floating roof and the primary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the tank, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the fabric seal, the facility shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §60.115b(a)(3). Such a request

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for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR Part 60 §60.113b (a)(2)]

- l. For tanks with primary and secondary seals, the facility shall (i) visually inspect the vessel as specified in paragraph (a)(4) of this section at least every 5 years; or (ii) visually inspect the vessel as specified in paragraph (a)(2) of this section. [40 CFR Part 60 §60.113b (a)(3)]
- m. The facility shall visibly inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and any sleeve seals each time the tank is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraphs (a)(2) and (a)(3)(ii) of this section and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of this section. [40 CFR Part 60 §60.113b (a)(4)]
- n. The facility shall notify the Administrator in writing at least 30 days prior to the filling or refilling of the tank in order to afford the Administrator the opportunity to have an observer present. If the inspection is not planned and the facility could not have known about the inspection 30 days in advance of refilling the tank, the facility shall notify the Administrator at least 7 days prior to the refilling of the tank. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling. [40 CFR Part 60 §60.113b (a)(5)]
- o. The facility shall keep records and furnish reports as required by this section for at least 2 years. [40 CFR Part 60 §60.115b]
- p. The facility shall keep a record of each inspection performed as required by §60.113b (a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the tank on which the inspection was performed and shall contain the date the tank was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR Part 60 §60.115b (a)(2)]
- q. If any of the conditions described in §60.113b (a)(2) are detected during the annual visual inspection required by §60.113b(a)(2), a report shall be furnished to

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the Administrator within 30 days of the inspection. Each report shall identify the tank, the nature of the defects, and the date the storage vessel was emptied or the nature of and the date the repair was made. [40 CFR Part 60 §60.115b (a)(3)]

- r. After each inspection required by §60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in §60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reasons it did not meet the specifications of §60.112b(a)(1) or §60.113b(a)(3) and list each repair made. [40 CFR Part 60 §60.115b (a)(3)]
- s. The facility shall keep copies of all records required by this section for at least two years. The records required by §60.116b (b) shall be kept for the life of the tank. [40 CFR Part 60 §60.116b (a)]
- t. The facility shall keep readily accessible records showing the dimension and an analysis showing the capacity of the tank. [40 CFR Part 60 §60.116b (b)]
- u. The facility shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. The maximum true vapor pressure is to be determined using one of the options detailed in §60.116b (e). [40 CFR Part 60 §60.116b (c)]

SN-11

Loading Rack

Source Description

At the loading racks, products are transferred from the storage tanks to tank trucks. Vapors from filling are incinerated by a flare. The loading racks have five lanes and 28 loading arms. All five loading lanes may be used for products with vapor pressures up to RVP 13 gasoline. This configuration limits loading to 215,000 gal/hr of gasoline (RVP 13). Pursuant to §19.304 of Regulation 19 and 40 CFR 60, Subpart XX-Standards of Performance for Bulk Gasoline Terminals, the loading racks are an affected source. Applicable requirements are outlined in the following Specific Conditions.

Specific Conditions

15. This source shall not exceed the emission rates set forth in the following table. Compliance with these emission limits shall be demonstrated by compliance with Plantwide Condition #12. [Regulation No. 19 §19.501 *et seq.* effective July 15, 2007, and 40 CFR Part 52, Subpart E]

Table 8 – Loading Rack Maximum Criteria Pollutant Emission Rate

SN	Pollutant	lb/hr	tpy
11 (98% efficient flare)	VOC	62.8	65.9
	CO	20.8	18.8
	NO _x	3.8	3.5

16. This source shall not exceed the emission rates set forth in the following table. Compliance with these emission limits shall be demonstrated by compliance with Plantwide Condition #12. [Regulation No. 18 §18.801 and A.C.A. §8-4-203 as referenced by §8 4-304 and §8-4-311]

Table 9 – Loading Rack Maximum Non-Criteria Emission Rate

SN	Pollutant	lb/hr	tpy
11	Benzene	0.05	0.05
	Toluene	0.07	0.07
	Ethyl Benzene	0.01	0.01
	Xylene	0.04	0.04
	Hexane	0.15	0.16
	2,2,4- Trimethylpentane	0.04	0.04

17. The vapor control systems at the facility shall be properly maintained and used to prevent gasoline vapors from being emitted into the atmosphere in excess of the rate listed in the table below. Compliance with this emission limit shall be demonstrated by compliance with Specific Condition #21. [Regulation No. 19 §19.1005(A)(3)]

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Table 10 – Maximum Vapor Collection System VOC Loses

SN	Pollutant	mg VOC/liter of gasoline loaded
11	VOC	80

18. The maximum simultaneous pumping rate resulting in the maximum emission rate at the loading racks is 215,000 gal/hr of RVP 13 gasoline. This bottleneck is demonstrated by the turnaround time for loading one truck in each of the five loading lanes. Any increases in the number of fueling lanes used to load RVP 13 gasoline or lower vapor pressure products (excluding diesel fuel and lower vapor pressure products) shall require a modification of this permit. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

19. The facility shall not allow a gasoline tank truck to be emptied or filled unless the gasoline truck: [§19.1005 (D)(1) of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
 - a. Is tested on an annual schedule according to the test procedure referenced in §19.1004 (F)(3).
 - b. Sustains a pressure change of no more than 750 Pascals (3 in. of H₂O) in five minutes when pressurized to a gauge pressure of 4,500 Pascals (18 in. of H₂O) or evacuated to a gauge pressure of 1,500 Pascals (6 in. of H₂O) during the testing.
 - c. Is repaired by the owner or operator and retested within 15 days of testing if it does not meet the described criteria.

20. The facility shall operate the vapor collection system and gasoline loading equipment in a manner that prevents: [§19.1005 (D)(2)(a) of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
 - a. Gauge pressure from exceeding 4,500 Pascals (18 in. of H₂O) and vacuum from exceeding 1,500 Pascals (6 in. of H₂O) in the gasoline tank truck.
 - b. A reading equal to or greater than 100 percent of the lower explosive limit (LEL, measured as propane) at 2.5 centimeters from all points on the perimeter of a potential leak source when measured by the method referenced in §19.1004 (F)(3) during loading or unloading operations.
 - c. Avoidable visible liquid leaks during loading or unloading operations.

40 CFR Part 60, Subpart XX Conditions

21. The emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline tank trucks are not to exceed the emission rates set forth in the following table. Compliance with this emission limit has been demonstrated by

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testing submitted on March 23, 2000. [Regulation No. 19 §19.304 and 40 CFR 60 §60.502(b)]

Table 11 – Maximum Vapor Collection System Total Organic Compound Losses

SN	Pollutant	mg TOC/liter gasoline loaded
11	TOC	35

22. The loading racks are an affected source of 40 CFR Part 60, Subpart XX. Applicable provisions include, but are not limited to, the following: [Regulation 19 §19.304 and 40 CFR Part 60, Subpart XX]
- a. The racks are equipped with a vapor collection system designed to collect the total organic compounds vapors displaced from tank trucks during product loading. [40 CFR Part 60 §60.502(a)]
 - b. The vapor collection system is designed to prevent total organic compound vapors collected at one loading rack from passing to another loading rack. [40 CFR Part 60 §60.502(d)]
 - c. The loadings of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures: [40 CFR Part 60 §60.502(e)]
 - i. The facility shall obtain the vapor tightness documentation described in §60.505(b) for each gasoline tank truck which is to be loaded at the facility.
 - ii. The facility shall require the tank identification number to be recorded as each gasoline tank truck is loaded at the facility.
 - iii. The facility shall cross-check each tank identification number obtained in item 2 with the file of tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded.
 - iv. The facility shall notify the owner or operator of each non-vapor tight gasoline tank truck loaded at the facility within 3 weeks after the loading has occurred.
 - v. The facility shall take steps assuring that the non-vapor tight gasoline tank truck will not be reloaded at the affected facility until vapor tightness documentation for that tank is obtained.
 - d. The facility shall act to insure that loadings of gasoline tank trucks at the facility are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system. [40 CFR Part 60 §60.502(f)]

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- e. The facility shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the facility (i.e., training drivers in hookup procedures and posting visible reminder signs at the affected loading racks). [40 CFR Part 60 §60.502(g)]
- f. The vapor collection and liquid loading equipment shall be operated to prevent gauge pressure in the delivery tank from exceeding 4,500 Pascals (450 mm of H₂O) during product loading. This level is not to be exceeded when measured by the procedures specified in §60.503(d). [40 CFR Part 60 §60.502(h)]
- g. No pressure-vacuum vent in the bulk gasoline terminal's vapor collection system shall begin to open at a system pressure less than 4,500 Pascals (450 mm of H₂O). [40 CFR Part 60 §60.502(i)]
- h. Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For this inspection, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected. [40 CFR Part 60 §60.502(j)]
- i. Immediately before the performance test required to determine compliance with §60.502 (b) and (h), the facility shall use Method 21 to monitor for leakage of vapor all potential sources in the terminal's vapor collection system equipment while a gasoline tank truck is being loaded. The owner shall repair all leaks with readings of 10,000 ppm (as methane) or greater before conducting the performance test. [40 CFR Part 60 §60.503(b)]
- j. The facility shall determine compliance with the standards of §60.502 (b) as outlined in §60.503(c)(1), (2), (3), (4), (5), (6), and (7). [40 CFR Part 60 §60.503 (c)]
- k. The facility shall determine compliance with the standards of §60.502 (h) as outlined in §60.503 (d)(1) and (2). [40 CFR Part 60 §60.503 (d)]
- l. The tank truck vapor tightness documentation required under §60.502(e)(1) shall be kept on file at the terminal in a permanent form available for inspection. [40 CFR Part 60 §60.505 (a)]
- m. The documentation file for each gasoline tank truck shall be updated at least once per year to reflect current test results as determined by Method 27. This documentation shall include the following information: [40 CFR Part 60 §60.505 (b)]
 - i. Test title: Gasoline Delivery Tank Pressure Test - EPA Reference Method 27,

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- ii. Tank owner and address,
 - iii. Tank identification number,
 - iv. Testing location,
 - v. Date of test,
 - vi. Tester name and signature,
 - vii. Witnessing inspector, if any: name, signature, and affiliation, and
 - viii. Test results: actual pressure change in 5 minutes, mm of H₂O (average for 2 runs)
- n. Pursuant to §60.505 (c), a record of each monthly leak inspection required under §60.502(j) shall be kept on file at the terminal for at least 2 years. Inspection records shall include the following information:
- i. Date of inspection,
 - ii. Findings (may indicate no leaks discovered; or location, nature, and severity of each leak),
 - iii. Leak determination method, and
 - iv. Corrective action (date each leak repaired; reasons for any repair interval in excess of 15 days).
 - v. Inspector name and signature.
- o. Pursuant to §60.505 (d), the facility shall keep documentation of all notifications required under §60.502(e)(4) on file at the terminal for at least 2 years.

CAM Requirements

- 23. The permittee shall install, operate, and maintain a flame detection device on the flare's pilot at all times while the loading racks are in use. [Regulation No. 19 §19.703, 40 CFR Part 52 Subpart E, and Part §64.6]
- 24. An alarm (visible and/or audible) shall be triggered when the flame detection device fails to detect a flame while the loading racks are in use. [Regulation No. 19 §19.703, 40 CFR Part 52 Subpart E, and 40 CFR Part §64.6(c)(1)]

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SN-12

Air Stripper

Description

The Air Stripper has a design rate of 100 gallons per minute. It removes dissolved hydrocarbons from wastewater. It was installed in 1992 and removed from service in 1999. This source cannot be brought back into service unless the permit is modified. If brought back into service, this source will not be considered an insignificant activity unless the actual capacity of the air stripper is demonstrated.

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SN-15

Fugitive Emissions

Description

The following is the summary of the fugitive emission sources at the facility. They are based on the number of valves, loading arm valves, open-ended lines, flanges, and pump seals at the facility.

Specific Conditions

25. The fugitive emissions at this facility shall not exceed the emission rates set forth in the following table. Compliance with these emission limits shall be demonstrated by compliance with Specific Condition #26. [Regulation No. 19 §19.501 *et seq.* effective July 15, 2007, and 40 CFR Part 52, Subpart E]

Table 12 – Fugitive Emission Rates

SN	Pollutant	lb/hr	tpy
--	VOC	0.2	0.8

26. The facility shall perform an annual facility count of valves, loading arm valves, open-ended lines, flanges, and pump seals in order to modify the permit if necessary for any significant changes in emissions due to changes in piping at the facility. At the issuance of this permit, the submitted count was- 562 valves, 1213 flanges, and 90 pump seals. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
27. Records of the annual facility count of valves, flanges, and pump seals shall be maintained on an annual basis. Such records shall be maintained on-site and submitted in accordance with General Provision #7. [Regulation 19 §19.705 and 40 CFR Part 52, Subpart E]

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SN-18 and SN-19

Tank #18 and Tank #19 (Bio-Diesel Only)

Description

Tank #18 and Tank #19 are each 20,000 gallon vertical fixed roof tanks used to store bio-diesel.

28. This source shall not exceed the emission rates set forth in the following table. Compliance with these emission limits shall be demonstrated by compliance with Plantwide Condition #17. [Regulation No. 19 §19.501 *et seq.* effective July 15, 2007, and 40 CFR Part 52, Subpart E]

Table 13 – Bio-Diesel Tanks Maximum Criteria Pollutant Emission Rates

SN	Pollutant	lb/hr	tpy
18	VOC	1.6	0.05
19	VOC	1.6	0.05

29. Tank #18 and Tank #19 shall only be used to store bio-diesel fuel. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6]

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Section V: COMPLIANCE PLAN AND SCHEDULE

Arkansas Terminaling and Trading 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: PLANT WIDE CONDITIONS

1. The permittee will 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 No. 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 No.19 §19.410(B) and 40 CFR Part 52, Subpart E]
3. The permittee must test any equipment scheduled for testing, unless 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) days in advance of such test. The permittee will submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation No.19 §19.702 and/or Regulation No.18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
4. The permittee must provide: [Regulation No.19 §19.702 and/or Regulation No.18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
 - 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.
5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee will maintain the equipment in good condition at all times. [Regulation No.19 §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation No. 26 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
7. No tank bottoms shall be processed on-site except for storage prior to off-site disposal. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

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8. The facility shall keep records of the dates and amounts of tank bottoms shipped from the facility. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
9. Records of the tank bottoms shall be maintained on a twelve month rolling basis, updated monthly. These records shall be maintained on-site and submitted to the Department in accordance with General Provision #7. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]
10. The total throughput of diesel (excluding biodiesel) at the facility shall be limited to 225,000,000 gallons per consecutive twelve month period. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
11. The permittee shall maintain monthly records and a 12 month rolling total that demonstrate compliance with Plantwide Condition #10. The permittee shall update the records by the fifteenth day of the month following the month to which the records pertain. These records shall be maintained on-site and submitted to the Department in accordance with General Provision #7. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]
12. The total throughput of RVP 13 gasoline or lower vapor pressure products (excluding diesel and jet fuel) at the facility shall be limited to 450,000,000 gallons per consecutive 12 month period. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
13. Records for the annual throughput of RVP 13 gasoline or lower vapor pressure products (excluding diesel and jet fuel) shall be maintained on a twelve month rolling basis to demonstrate compliance with Plantwide Condition #12. The permittee shall update the records by the fifteenth day of the month following the month to which the records pertain. Such records shall be maintained on-site and submitted in accordance with General Provision #7. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]
14. The total throughput of jet fuel at the facility shall be limited to 75,000,000 gallons per consecutive 12 month period. [Regulation No. 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
15. Records for the annual throughput of jet fuel shall be maintained on a twelve month rolling basis to demonstrate compliance with Plantwide Condition #14. The permittee shall update the records by the fifteenth day of the month following the month to which the records pertain. These records shall be maintained on-site and submitted to the Department in accordance with General Provision #7. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E].
16. The permittee may change the service of Tanks #2, #3, #5, and/or #8 from gasoline to a lower vapor pressure product at the discretion of the facility. Written notification will be provided to the Administrator and the Department a minimum of 7 days in advance of the proposed changes. [Regulation No. 26 §26.802]

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17. The total throughput of biodiesel at this facility shall be limited to 980,000 gallons per consecutive twelve month period. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6]
18. The permittee shall maintain monthly records and a 12 month rolling total that demonstrate compliance with Plantwide Condition #17. The permittee shall update the records by the fifteenth day of the month following the month to which the records pertain. These records shall be maintained on-site and submitted to the Department in accordance with General Provision #7. [Regulation No. 19 §19.705 and 40 CFR Part 52, Subpart E]

Title VI Provisions

19. 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.
20. 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.
 - c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like appliance" as defined at §82.152.)

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- 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.
21. 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.
22. 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.
23. 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, "Significant New Alternatives Policy Program".

Permit Shield

24. 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.
- a. The permit specifically identifies the following as applicable requirements based upon the information submitted by the permittee in an application dated July 25, 2007.

Table 14 - Applicable Regulations

Source No.	Regulation	Description
Facility	Arkansas Regulation No. 19	Regulations of the Arkansas State Implementation Plan for Air Pollution Control
Facility	Arkansas Regulation No. 26	Regulations of the Arkansas Operating Air Permit Program
02, 03	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commences After May 18, 1978 and Prior to July 23, 1994.

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Source No.	Regulation	Description
05, 16	40 CFR Part 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984
11	40 CFR Part 60, Subpart XX	Standards of Performance for Bulk Gasoline Terminals

- b. The permit specifically identifies the following as inapplicable based upon information submitted by the permittee in an application dated July 25, 2007.

Table 15 - Inapplicable Regulations

Source No.	Regulation	Description
01-05, 13, 14, 16, 17	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978
Facility	40 CFR Part 63, Subpart R	National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)

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Section VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement is a significant activity even if this activity meets the criteria of §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 7/27/2007.

Table 16 - Insignificant Activities

Description	Category
550 gallon Red Dye (For Diesel)	A3
1,000 gallon Phillips Jet A Additive	A3
2,000 gallon Shell Jet A Additive	A3
3,000 gallon Phillips Gasoline Additive	A3
4,000 gallon Generic Gasoline Additive	A3
8,000 gallon Lubricity Additive	A3
10,000 gallon Generic Gasoline Additive	A3
10,000 gallon Shell Gasoline Additive	A3
400 gallon Diesel Fuel	A3
400 gallon Diesel Fuel	A3
150 kw Emergency Generator (To be operated < 500 hrs/yr)	A13
250 kw Emergency Generator (To be operated < 500 hrs/yr)	A13
550 gallon Red Dye Tank	A3
4,000 gallon Fuel Additive Tank	A3
Three 20,000 gallon Ethanol Storage Tanks	A13

Pursuant to §26.304 of Regulation 26, the Department determined the emission units, operations, or activities contained in Regulation 19, Appendix A, Group B, to be insignificant activities. Activities included in this list are allowable under this permit and need not be specifically identified.

Section VIII: GENERAL PROVISIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation No. 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 §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), effective September 26, 2002]
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 No. 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 No. 26 §26.701(A)(2)]
5. The permittee must maintain the following records of monitoring information as required by this permit. [40 CFR 70.6(a)(3)(ii)(A) and Regulation No. 26 §26.701(C)(2)]
 - 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.

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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 No. 26 §26.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every six (6) months. If 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 within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. 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: [40 CFR 70.6(a)(3)(iii)(A) and §26.701(C)(3)(a) of Regulation #26]

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

8. The permittee will 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 Regulation 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

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- ix. The name of the person submitting the report.

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

- b. For all deviations, the permittee will 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 in the initial and full report required in 8a. [40 CFR 70.6(a)(3)(iii)(B), Regulation No. 26 §26.701(C)(3)(b), Regulation No. 19 §19.601 and §19.602]
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), §26.701(E) of Regulation No. 26, 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 No. 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 No. 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 No. 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 No. 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 No. 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

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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 No. 26 §26.701(F)(5)]

15. The permittee must pay all permit fees in accordance with the procedures established in Regulation No. 9. [40 CFR 70.6(a)(7) and Regulation No. 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 changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation No. 26 §26.701(H)]
17. If the permit allows different operating scenarios, the permittee will, 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 No. 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 No. 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 No. 26 §26.2. [40 CFR 70.6(c)(1) and Regulation No. 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 No. 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.

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21. The permittee will 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 within 30 days following the last day of the anniversary month of the initial Title V permit. 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 No. 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;
 - 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 No. 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]

APPENDIX A

40 CFR Part 60, Subpart Ka – *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984*

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Tit e 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

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Subpart Ka—Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984

§ 60.110a Applicability and designation of affected facility.

(a) *Affected facility.* Except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a storage capacity greater than 151,416 liters (40,000 gallons) that is used to store petroleum liquids for which construction is commenced after May 18, 1978.

(b) Each petroleum liquid storage vessel with a capacity of less than 1,589,873 liters (420,000 gallons) used for petroleum or condensate stored, processed, or treated prior to custody transfer is not an affected facility and, therefore, is exempt from the requirements of this subpart.

(c) *Alternative means of compliance* —(1) *Option to comply with part 65.* Owners or operators may choose to comply with 40 CFR part 65, subpart C, to satisfy the requirements of §§60.112a through 60.114a for storage vessels that are subject to this subpart that store petroleum liquids that, as stored, have a maximum true vapor pressure equal to or greater than 10.3 kPa (1.5 psia). Other provisions applying to owners or operators who choose to comply with 40 CFR part 65 are provided in 40 CFR 65.1.

(2) *Part 60, subpart A.* Owners or operators who choose to comply with 40 CFR part 65, subpart C, must also comply with §§60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for those storage vessels. All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph (c)(2) do not apply to owners or operators of storage vessels complying with 40 CFR part 65, subpart C, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR part 65, subpart C, must comply with 40 CFR part 65, subpart A.

[45 FR 23379, Apr. 4, 1980, as amended at 65 FR 78275, Dec. 14, 2000]

§ 60.111a Definitions.

In addition to the terms and their definitions listed in the Act and subpart A of this part the following definitions apply in this subpart:

(a) *Storage vessel* means each tank, reservoir, or container used for the storage of petroleum liquids, but does not include:

(1) Pressure vessels which are designed to operate in excess of 204.9 kPa (15 psig) without emissions

to the atmosphere except under emergency conditions.

(2) Subsurface caverns or porous rock reservoirs, or

(3) Underground tanks if the total volume of petroleum liquids added to and taken from a tank annually does not exceed twice the volume of the tank.

(b) *Petroleum liquids* means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery but does not mean Nos. 2 through 6 fuel oils as specified in ASTM D396–78, 89, 90, 92, 96, or 98, gas turbine fuel oils Nos. 2–GT through 4–GT as specified in ASTM D2880–78 or 96, gas turbine fuel oils Nos. 2–GT through 4–GT as specified in ASTM D2880–78 or 96, or diesel fuel oils Nos. 2–D and 4–D as specified in ASTM D975–78, 96, or 98a. (These three methods are incorporated by reference—see §60.17.)

(c) *Petroleum refinery* means each facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of petroleum or through redistillation, cracking, extracting, or reforming of unfinished petroleum derivatives.

(d) *Petroleum* means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

(e) *Condensate* means hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

(f) *True vapor pressure* means the equilibrium partial pressure exerted by a petroleum liquid such as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, Evaporation Loss from External Floating-Roof Tanks, Second Edition, February 1980 (incorporated by reference—see §60.17).

(g) *Reid vapor pressure* is the absolute vapor pressure of volatile crude oil and nonviscous petroleum liquids, except liquified petroleum gases, as determined by ASTM D323–82 or 94 (incorporated by reference—see §60.17).

(h) *Liquid-mounted seal* means a foam or liquid-filled primary seal mounted in contact with the liquid between the tank wall and the floating roof continuously around the circumference of the tank.

(i) *Metallic shoe seal* includes but is not limited to a metal sheet held vertically against the tank wall by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

(j) *Vapor-mounted seal* means a foam-filled primary seal mounted continuously around the circumference of the tank so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface, and the floating roof.

(k) *Custody transfer* means the transfer of produced petroleum and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

[45 FR 23379, Apr. 4, 1980, as amended at 48 FR 3737, Jan. 27, 1983; 52 FR 11429, Apr. 8, 1987; 65 FR 61756, Oct. 17, 2000]

§ 60.112a Standard for volatile organic compounds (VOC).

(a) The owner or operator of each storage vessel to which this subpart applies which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia) shall equip the storage vessel with one of the following:

(1) An external floating roof, consisting of a pontoon-type or double-deck-type cover that rests on the surface of the liquid contents and is equipped with a closure device between the tank wall and the roof

edge. Except as provided in paragraph (a)(1)(ii)(D) of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal. The roof is to be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

(i) The primary seal is to be either a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. Each seal is to meet the following requirements:

(A) The accumulated area of gaps between the tank wall and the metallic shoe seal or the liquid-mounted seal shall not exceed 212 cm² per meter of tank diameter (10.0 in² per ft of tank diameter) and the width of any portion of any gap shall not exceed 3.81 cm (1 1/2 in).

(B) The accumulated area of gaps between the tank wall and the vapor-mounted seal shall not exceed 21.2 cm² per meter of tank diameter (1.0 in² per ft of tank diameter) and the width of any portion of any gap shall not exceed 1.27 cm (1/2 in).

(C) One end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 61 cm (24 in) above the stored liquid surface.

(D) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(ii) The secondary seal is to meet the following requirements:

(A) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in paragraph (a)(1)(ii)(B) of this section.

(B) The accumulated area of gaps between the tank wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal shall not exceed 21.2 cm² per meter of tank diameter (1.0 in² per ft. of tank diameter) and the width of any portion of any gap shall not exceed 1.27 cm (1/2 in.). There shall be no gaps between the tank wall and the secondary seal used in combination with a vapor-mounted primary seal.

(C) There are to be no holes, tears or other openings in the seal or seal fabric.

(D) The owner or operator is exempted from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal.

(iii) Each opening in the roof except for automatic bleeder vents and rim space vents is to provide a projection below the liquid surface. Each opening in the roof except for automatic bleeder vents, rim space vents and leg sleeves is to be equipped with a cover, seal or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use or as described in paragraph (a)(1)(iv) of this section. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting.

(iv) Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(2) A fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. The cover is to be floating at all times, (i.e., off the leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Each opening in the cover except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. Each opening in the cover except for automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped with a cover, seal, or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the cover is

floating except when the cover is being floated off or is being landed on the leg supports. Rim vents are to be set to open only when the cover is being floated off the leg supports or at the manufacturer's recommended setting.

(3) A vapor recovery system which collects all VOC vapors and gases discharged from the storage vessel, and a vapor return or disposal system which is designed to process such VOC vapors and gases so as to reduce their emission to the atmosphere by at least 95 percent by weight.

(4) A system equivalent to those described in paragraphs (a)(1), (a)(2), or (a)(3) of this section as provided in §60.114a.

(b) The owner or operator of each storage vessel to which this subpart applies which contains a petroleum liquid which, as stored, has a true vapor pressure greater than 76.6 kPa (11.1 psia), shall equip the storage vessel with a vapor recovery system which collects all VOC vapors and gases discharged from the storage vessel, and a vapor return or disposal system which is designed to process such VOC vapors and gases so as to reduce their emission to the atmosphere by at least 95 percent by weight.

[45 FR 23379, Apr. 4, 1980, as amended at 45 FR 83229, Dec. 18, 1980]

§ 60.113a Testing and procedures.

(a) Except as provided in §60.8(b) compliance with the standard prescribed in §60.112a shall be determined as follows or in accordance with an equivalent procedure as provided in §60.114a.

(1) The owner or operator of each storage vessel to which this subpart applies which has an external floating roof shall meet the following requirements:

(i) Determine the gap areas and maximum gap widths between the primary seal and the tank wall and between the secondary seal and the tank wall according to the following frequency:

(A) For primary seals, gap measurements shall be performed within 60 days of the initial fill with petroleum liquid and at least once every five years thereafter. All primary seal inspections or gap measurements which require the removal or dislodging of the secondary seal shall be accomplished as rapidly as possible and the secondary seal shall be replaced as soon as possible.

(B) For secondary seals, gap measurements shall be performed within 60 days of the initial fill with petroleum liquid and at least once every year thereafter.

(C) If any storage vessel is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill for the purposes of paragraphs (a)(1)(i)(A) and (a)(1)(i)(B) of this section.

(D) Keep records of each gap measurement at the plant for a period of at least 2 years following the date of measurement. Each record shall identify the vessel on which the measurement was performed and shall contain the date of the seal gap measurement, the raw data obtained in the measurement process required by paragraph (a)(1)(ii) of this section and the calculation required by paragraph (a)(1)(iii) of this section.

(E) If either the seal gap calculated in accord with paragraph (a)(1)(iii) of this section or the measured maximum seal gap exceeds the limitations specified by §60.112a of this subpart, a report shall be furnished to the Administrator within 60 days of the date of measurements. The report shall identify the vessel and list each reason why the vessel did not meet the specifications of §60.112a. The report shall also describe the actions necessary to bring the storage vessel into compliance with the specifications of §60.112a.

(ii) Determine gap widths in the primary and secondary seals individually by the following procedures:

(A) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

(B) Measure seal gaps around the entire circumference of the tank in each place where a 1/8-inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location.

(C) The total surface area of each gap described in paragraph (a)(1)(ii)(B) of this section shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

(iii) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the appropriate ratio in the standard in §60.112a(a)(1)(i) and §60.112a(a)(1)(ii).

(iv) Provide the Administrator 30 days prior notice of the gap measurement to afford the Administrator the opportunity to have an observer present.

(2) The owner or operator of each storage vessel to which this subpart applies which has a vapor recovery and return or disposal system shall provide the following information to the Administrator on or before the date on which construction of the storage vessel commences:

(i) Emission data, if available, for a similar vapor recovery and return or disposal system used on the same type of storage vessel, which can be used to determine the efficiency of the system. A complete description of the emission measurement method used must be included.

(ii) The manufacturer's design specifications and estimated emission reduction capability of the system.

(iii) The operation and maintenance plan for the system.

(iv) Any other information which will be useful to the Administrator in evaluating the effectiveness of the system in reducing VOC emissions.

[45 FR 23379, Apr. 4, 1980, as amended at 52 FR 11429, Apr. 8, 1987]

§ 60.114a Alternative means of emission limitation.

(a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in emissions at least equivalent to the reduction in emissions achieved by any requirement in §60.112a, the Administrator will publish in the Federal Register a notice permitting the use of the alternative means for purposes of compliance with that requirement.

(b) Any notice under paragraph (a) of this section will be published only after notice and an opportunity for a hearing.

(c) Any person seeking permission under this section shall submit to the Administrator a written application including:

(1) An actual emissions test that uses a full-sized or scale-model storage vessel that accurately collects and measures all VOC emissions from a given control device and that accurately simulates wind and accounts for other emission variables such as temperature and barometric pressure.

(2) An engineering evaluation that the Administrator determines is an accurate method of determining equivalence.

(d) The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emissions reduction as specified in §60.112a.

(e) The primary vapor-mounted seal in the "Volume-Maximizing Seal" manufactured by R.F.I. Services Corporation is approved as equivalent to the vapor-mounted seal required by §60.112a(a)(1)(i) and must meet the gap criteria specified in §60.112a(a)(1)(i)(B). There shall be no gaps between the tank wall and any secondary seal used in conjunction with the primary seal in the "Volume-Maximizing Seal".

[52 FR 11429, Apr. 8, 1987]

§ 60.115a Monitoring of operations.

(a) Except as provided in paragraph (d) of this section, the owner or operator subject to this subpart shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

(b) Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(c) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

(d) The following are exempt from the requirements of this section:

(1) Each owner or operator of each storage vessel storing a petroleum liquid with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

(2) The owner or operator of each storage vessel equipped with a vapor recovery and return or disposal system in accordance with the requirements of §60.112a(a)(3) and (b), or a closed vent system and control device meeting the specifications of 40 CFR 65.42(b)(4), (b)(5), or (c).

[45 FR 23379, Apr. 4, 1980, as amended at 65 FR 78275, Dec. 14, 2000]

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APPENDIX B

40 CFR Part 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

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Subpart Kb—Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

Source: 52 FR 11429, Apr. 8, 1987, unless otherwise noted.

§ 60.110b Applicability and designation of affected facility.

(a) Except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m³) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.

(b) This subpart does not apply to storage vessels with a capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure less than 15.0 kPa.

(c) [Reserved]

(d) This subpart does not apply to the following:

(1) Vessels at coke oven by-product plants.

(2) Pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere.

(3) Vessels permanently attached to mobile vehicles such as trucks, railcars, barges, or ships.

(4) Vessels with a design capacity less than or equal to 1,589.874 m³ used for petroleum or condensate stored, processed, or treated prior to custody transfer.

(5) Vessels located at bulk gasoline plants.

(6) Storage vessels located at gasoline service stations.

(7) Vessels used to store beverage alcohol.

(8) Vessels subject to subpart GGGG of 40 CFR part 63.

(e) *Alternative means of compliance* —(1) *Option to comply with part 65.* Owners or operators may choose to comply with 40 CFR part 65, subpart C, to satisfy the requirements of §§60.112b through 60.117b for storage vessels that are subject to this subpart that meet the specifications in paragraphs (e)(1)(i) and (ii) of this section. When choosing to comply with 40 CFR part 65, subpart C, the monitoring requirements of §60.116b(c), (e), (f)(1), and (g) still apply. Other provisions applying to owners or operators who choose to comply with 40 CFR part 65 are provided in 40 CFR 65.1.

(i) A storage vessel with a design capacity greater than or equal to 151 m³ containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa; or

(ii) A storage vessel with a design capacity greater than 75 m³ but less than 151 m³ containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa.

(2) *Part 60, subpart A.* Owners or operators who choose to comply with 40 CFR part 65, subpart C, must also comply with §§60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for those storage vessels. All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph (e)(2) do not apply to owners or operators of storage vessels complying with 40 CFR part 65, subpart C, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR part 65, subpart C, must comply with 40 CFR part 65, subpart A.

(3) *Internal floating roof report.* If an owner or operator installs an internal floating roof and, at initial startup, chooses to comply with 40 CFR part 65, subpart C, a report shall be furnished to the Administrator stating that the control equipment meets the specifications of 40 CFR 65.43. This report shall be an attachment to the notification required by 40 CFR 65.5(b).

(4) *External floating roof report.* If an owner or operator installs an external floating roof and, at initial startup, chooses to comply with 40 CFR part 65, subpart C, a report shall be furnished to the Administrator stating that the control equipment meets the specifications of 40 CFR 65.44. This report shall be an attachment to the notification required by 40 CFR 65.5(b).

[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989; 65 FR 78275, Dec. 14, 2000; 68 FR 59332, Oct. 15, 2003]

§ 60.111b Definitions.

Terms used in this subpart are defined in the Act, in subpart A of this part, or in this subpart as follows:

Bulk gasoline plant means any gasoline distribution facility that has a gasoline throughput less than or equal to 75,700 liters per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal requirement or Federal, State or local law, and discoverable by the Administrator and any other person.

Condensate means hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

Custody transfer means the transfer of produced petroleum and/or condensate, after processing and/or treatment in the producing operations, from storage vessels or automatic transfer facilities to pipelines or any other forms of transportation.

Fill means the introduction of VOL into a storage vessel but not necessarily to complete capacity.

Gasoline service station means any site where gasoline is dispensed to motor vehicle fuel tanks from stationary storage tanks.

Maximum true vapor pressure means the equilibrium partial pressure exerted by the volatile organic compounds (as defined in 40 CFR 51.100) in the stored VOL at the temperature equal to the highest calendar-month average of the VOL storage temperature for VOL's stored above or below the ambient

temperature or at the local maximum monthly average temperature as reported by the National Weather Service for VOL's stored at the ambient temperature, as determined:

(1) In accordance with methods described in American Petroleum institute Bulletin 2517, Evaporation Loss From External Floating Roof Tanks, (incorporated by reference—see §60.17); or

(2) As obtained from standard reference texts; or

(3) As determined by ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17);

(4) Any other method approved by the Administrator.

Petroleum means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

Petroleum liquids means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery.

Process tank means a tank that is used within a process (including a solvent or raw material recovery process) to collect material discharged from a feedstock storage vessel or equipment within the process before the material is transferred to other equipment within the process, to a product or by-product storage vessel, or to a vessel used to store recovered solvent or raw material. In many process tanks, unit operations such as reactions and blending are conducted. Other process tanks, such as surge control vessels and bottoms receivers, however, may not involve unit operations.

Reid vapor pressure means the absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquified petroleum gases, as determined by ASTM D323–82 or 94 (incorporated by reference—see §60.17).

Storage vessel means each tank, reservoir, or container used for the storage of volatile organic liquids but does not include:

(1) Frames, housing, auxiliary supports, or other components that are not directly involved in the containment of liquids or vapors;

(2) Subsurface caverns or porous rock reservoirs; or

(3) Process tanks.

Volatile organic liquid (VOL) means any organic liquid which can emit volatile organic compounds (as defined in 40 CFR 51.100) into the atmosphere.

Waste means any liquid resulting from industrial, commercial, mining or agricultural operations, or from community activities that is discarded or is being accumulated, stored, or physically, chemically, or biologically treated prior to being discarded or recycled.

[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989; 65 FR 61756, Oct. 17, 2000; 68 FR 59333, Oct. 15, 2003]

§ 60.112b Standard for volatile organic compounds (VOC).

(a) The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa but less than 76.6 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa but less than 76.6 kPa, shall equip each storage vessel with one of the following:

(1) A fixed roof in combination with an internal floating roof meeting the following specifications:

(i) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

(ii) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

(A) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

(B) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

(C) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

(iii) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

(iv) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

(v) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

(vi) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

(vii) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

(viii) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(ix) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(2) An external floating roof. An external floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Each external floating roof must meet the following specifications:

(i) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

(A) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in §60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

(B) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in §60.113b(b)(4).

(ii) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(iii) The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

(3) A closed vent system and control device meeting the following specifications:

(i) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, §60.485 (b).

(ii) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements (§60.18) of the General Provisions.

(4) A system equivalent to those described in paragraphs (a)(1), (a)(2), or (a)(3) of this section as provided in §60.114b of this subpart.

(b) The owner or operator of each storage vessel with a design capacity greater than or equal to 75 m³ which contains a VOL that, as stored, has a maximum true vapor pressure greater than or equal to 76.6 kPa shall equip each storage vessel with one of the following:

(1) A closed vent system and control device as specified in §60.112b(a)(3).

(2) A system equivalent to that described in paragraph (b)(1) as provided in §60.114b of this subpart.

(c) *Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia.* This paragraph applies only to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, in Elkton, Virginia ("site").

(1) For any storage vessel that otherwise would be subject to the control technology requirements of paragraphs (a) or (b) of this section, the site shall have the option of either complying directly with the requirements of this subpart, or reducing the site-wide total criteria pollutant emissions cap (total emissions cap) in accordance with the procedures set forth in a permit issued pursuant to 40 CFR 52.2454. If the site chooses the option of reducing the total emissions cap in accordance with the procedures set forth in such permit, the requirements of such permit shall apply in lieu of the otherwise applicable requirements of this subpart for such storage vessel.

(2) For any storage vessel at the site not subject to the requirements of 40 CFR 60.112b (a) or (b), the requirements of 40 CFR 60.116b (b) and (c) and the General Provisions (subpart A of this part) shall not apply.

[52 FR 11429, Apr. 8, 1987, as amended at 62 FR 52641, Oct. 8, 1997]

§ 60.113b Testing and procedures.

The owner or operator of each storage vessel as specified in §60.112b(a) shall meet the requirements of paragraph (a), (b), or (c) of this section. The applicable paragraph for a particular storage vessel

depends on the control equipment installed to meet the requirements of §60.112b.

(a) After installing the control equipment required to meet §60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:

(1) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

(2) For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(3) For vessels equipped with a double-seal system as specified in §60.112b(a)(1)(ii)(B):

(i) Visually inspect the vessel as specified in paragraph (a)(4) of this section at least every 5 years; or

(ii) Visually inspect the vessel as specified in paragraph (a)(2) of this section.

(4) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraphs (a)(2) and (a)(3)(ii) of this section and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of this section.

(5) Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of this section to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

(b) After installing the control equipment required to meet §60.112b(a)(2) (external floating roof), the owner or operator shall:

(1) Determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency.

(i) Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter.

(ii) Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year thereafter.

(iii) If any source ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of paragraphs (b)(1)(i) and (b)(1)(ii) of this section.

(2) Determine gap widths and areas in the primary and secondary seals individually by the following procedures:

(i) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

(ii) Measure seal gaps around the entire circumference of the tank in each place where a 0.32-cm diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

(iii) The total surface area of each gap described in paragraph (b)(2)(ii) of this section shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

(3) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in paragraph (b)(4) of this section.

(4) Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in (b)(4) (i) and (ii) of this section:

(i) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 Cm² per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.

(A) One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface.

(B) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(ii) The secondary seal is to meet the following requirements:

(A) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in paragraph (b)(2)(iii) of this section.

(B) The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm² per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

(C) There are to be no holes, tears, or other openings in the seal or seal fabric.

(iii) If a failure that is detected during inspections required in paragraph (b)(1) of §60.113b(b) cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §60.115b(b)(4). Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(5) Notify the Administrator 30 days in advance of any gap measurements required by paragraph (b)(1) of this section to afford the Administrator the opportunity to have an observer present.

(6) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.

(i) If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL.

(ii) For all the inspections required by paragraph (b)(6) of this section, the owner or operator shall notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the Administrator the opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph (b)(6) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

(c) The owner or operator of each source that is equipped with a closed vent system and control device as required in §60.112b (a)(3) or (b)(2) (other than a flare) is exempt from §60.8 of the General Provisions and shall meet the following requirements.

(1) Submit for approval by the Administrator as an attachment to the notification required by §60.7(a)(1) or, if the facility is exempt from §60.7(a)(1), as an attachment to the notification required by §60.7(a)(2), an operating plan containing the information listed below.

(i) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.

(ii) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

(2) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (c)(1) of this section, unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

(d) The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in §60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, §60.18 (e) and (f).

[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989]

§ 60.114b Alternative means of emission limitation.

(a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in emissions at least equivalent to the reduction in emissions achieved by any requirement in §60.112b, the Administrator will publish in the Federal Register a notice permitting the use of the alternative means for purposes of compliance with that requirement.

(b) Any notice under paragraph (a) of this section will be published only after notice and an opportunity for a hearing.

(c) Any person seeking permission under this section shall submit to the Administrator a written application including:

(1) An actual emissions test that uses a full-sized or scale-model storage vessel that accurately collects and measures all VOC emissions from a given control device and that accurately simulates wind and accounts for other emission variables such as temperature and barometric pressure.

(2) An engineering evaluation that the Administrator determines is an accurate method of determining equivalence.

(d) The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emissions reduction as specified in §60.112b.

§ 60.115b Reporting and recordkeeping requirements.

The owner or operator of each storage vessel as specified in §60.112b(a) shall keep records and furnish reports as required by paragraphs (a), (b), or (c) of this section depending upon the control equipment installed to meet the requirements of §60.112b. The owner or operator shall keep copies of all reports and records required by this section, except for the record required by (c)(1), for at least 2 years. The record required by (c)(1) will be kept for the life of the control equipment.

(a) After installing control equipment in accordance with §60.112b(a)(1) (fixed roof and internal floating roof), the owner or operator shall meet the following requirements.

(1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(1) and §60.113b(a)(1). This report shall be an attachment to the notification required by §60.7(a)(3).

(2) Keep a record of each inspection performed as required by §60.113b (a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

(3) If any of the conditions described in §60.113b(a)(2) are detected during the annual visual inspection required by §60.113b(a)(2), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

(4) After each inspection required by §60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in §60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of §60.112b(a)(1) or §60.113b(a)(3) and list each repair made.

(b) After installing control equipment in accordance with §60.112b(a)(2) (external floating roof), the owner or operator shall meet the following requirements.

(1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(2) and §60.113b(b)(2), (b)(3), and (b)(4). This report shall be an attachment to the notification required by §60.7(a)(3).

(2) Within 60 days of performing the seal gap measurements required by §60.113b(b)(1), furnish the Administrator with a report that contains:

(i) The date of measurement.

(ii) The raw data obtained in the measurement.

(iii) The calculations described in §60.113b (b)(2) and (b)(3).

(3) Keep a record of each gap measurement performed as required by §60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain:

- (i) The date of measurement.
- (ii) The raw data obtained in the measurement.
- (iii) The calculations described in §60.113b (b)(2) and (b)(3).

(4) After each seal gap measurement that detects gaps exceeding the limitations specified by §60.113b (b)(4), submit a report to the Administrator within 30 days of the inspection. The report will identify the vessel and contain the information specified in paragraph (b)(2) of this section and the date the vessel was emptied or the repairs made and date of repair.

(c) After installing control equipment in accordance with §60.112b (a)(3) or (b)(1) (closed vent system and control device other than a flare), the owner or operator shall keep the following records.

(1) A copy of the operating plan.

(2) A record of the measured values of the parameters monitored in accordance with §60.113b(c)(2).

(d) After installing a closed vent system and flare to comply with §60.112b, the owner or operator shall meet the following requirements.

(1) A report containing the measurements required by §60.18(f) (1), (2), (3), (4), (5), and (6) shall be furnished to the Administrator as required by §60.8 of the General Provisions. This report shall be submitted within 6 months of the initial start-up date.

(2) Records shall be kept of all periods of operation during which the flare pilot flame is absent.

(3) Semiannual reports of all periods recorded under §60.115b(d)(2) in which the pilot flame was absent shall be furnished to the Administrator.

§ 60.116b Monitoring of operations.

(a) The owner or operator shall keep copies of all records required by this section, except for the record required by paragraph (b) of this section, for at least 2 years. The record required by paragraph (b) of this section will be kept for the life of the source.

(b) The owner or operator of each storage vessel as specified in §60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

(c) Except as provided in paragraphs (f) and (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

(d) Except as provided in paragraph (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

(e) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.

(1) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is

calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

(2) For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference—see §60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(ii) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

(3) For other liquids, the vapor pressure:

(i) May be obtained from standard reference texts, or

(ii) Determined by ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17); or

(iii) Measured by an appropriate method approved by the Administrator; or

(iv) Calculated by an appropriate method approved by the Administrator.

(f) The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

(1) Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in paragraph (e) of this section.

(2) For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in §60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

(i) ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17); or

(ii) ASTM D323–82 or 94 (incorporated by reference—see §60.17); or

(iii) As measured by an appropriate method as approved by the Administrator.

(g) The owner or operator of each vessel equipped with a closed vent system and control device meeting the specification of §60.112b or with emissions reductions equipment as specified in 40 CFR 65.42(b)(4), (b)(5), (b)(6), or (c) is exempt from the requirements of paragraphs (c) and (d) of this section.

[52 FR 11429, Apr. 8, 1987, as amended at 65 FR 61756, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000; 68 FR 59333, Oct. 15, 2003]

§ 60.117b Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: §§60.111b(f)(4), 60.114b, 60.116b(e)(3)(iii), 60.116b(e)(3)(iv), and 60.116b(f)(2)(iii).

[52 FR 11429, Apr. 8, 1987, as amended at 52 FR 22780, June 16, 1987]

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APPENDIX C

40 CFR Part 60, Subpart XX – *Standards of Performance for Bulk Gasoline Terminals*

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Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

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Subpart XX—Standards of Performance for Bulk Gasoline Terminals

Source: 48 FR 37590, Aug. 18, 1983, unless otherwise noted.

§ 60.500 Applicability and designation of affected facility.

(a) The affected facility to which the provisions of this subpart apply is the total of all the loading racks at a bulk gasoline terminal which deliver liquid product into gasoline tank trucks.

(b) Each facility under paragraph (a) of this section, the construction or modification of which is commenced after December 17, 1980, is subject to the provisions of this subpart.

(c) For purposes of this subpart, any replacement of components of an existing facility, described in paragraph (a) of this section, commenced before August 18, 1983 in order to comply with any emission standard adopted by a State or political subdivision thereof will not be considered a reconstruction under the provisions of 40 CFR 60.15.

Note: The intent of these standards is to minimize the emissions of VOC through the application of best demonstrated technologies (BDT). The numerical emission limits in this standard are expressed in terms of total organic compounds. This emission limit reflects the performance of BDT.

§ 60.501 Definitions.

The terms used in this subpart are defined in the Clean Air Act, in §60.2 of this part, or in this section as follows:

Bulk gasoline terminal means any gasoline facility which receives gasoline by pipeline, ship or barge, and has a gasoline throughput greater than 75,700 liters per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal, State or local law and discoverable by the Administrator and any other person.

Continuous vapor processing system means a vapor processing system that treats total organic compounds vapors collected from gasoline tank trucks on a demand basis without intermediate accumulation in a vapor holder.

Existing vapor processing system means a vapor processing system [capable of achieving emissions to the atmosphere no greater than 80 milligrams of total organic compounds per liter of gasoline loaded], the construction or refurbishment of which was commenced before December 17, 1980, and which was not constructed or refurbished after that date.

Flare means a thermal oxidation system using an open (without enclosure) flame.

Gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater which is used as a fuel for internal combustion engines.

Gasoline tank truck means a delivery tank truck used at bulk gasoline terminals which is loading gasoline or which has loaded gasoline on the immediately previous load.

Intermittent vapor processing system means a vapor processing system that employs an intermediate vapor holder to accumulate total organic compounds vapors collected from gasoline tank trucks, and treats the accumulated vapors only during automatically controlled cycles.

Loading rack means the loading arms, pumps, meters, shutoff valves, relief valves, and other piping and valves necessary to fill delivery tank trucks.

Refurbishment means, with reference to a vapor processing system, replacement of components of, or addition of components to, the system within any 2-year period such that the fixed capital cost of the new components required for such component replacement or addition exceeds 50 percent of the cost of a comparable entirely new system.

Thermal oxidation system means a combustion device used to mix and ignite fuel, air pollutants, and air to provide a flame to heat and oxidize hazardous air pollutants. Auxiliary fuel may be used to heat air pollutants to combustion temperatures.

Total organic compounds means those compounds measured according to the procedures in §60.503.

Vapor collection system means any equipment used for containing total organic compounds vapors displaced during the loading of gasoline tank trucks.

Vapor processing system means all equipment used for recovering or oxidizing total organic compounds vapors displaced from the affected facility.

Vapor-tight gasoline tank truck means a gasoline tank truck which has demonstrated within the 12 preceding months that its product delivery tank will sustain a pressure change of not more than 750 pascals (75 mm of water) within 5 minutes after it is pressurized to 4,500 pascals (450 mm of water). This capability is to be demonstrated using the pressure test procedure specified in Method 27.

[48 FR 37590, Aug. 18, 1983, as amended at 65 FR 61763, Oct. 17, 2000; 68 FR 70965, Dec. 19, 2003]

§ 60.502 Standard for Volatile Organic Compound (VOC) emissions from bulk gasoline terminals.

On and after the date on which §60.8(a) requires a performance test to be completed, the owner or operator of each bulk gasoline terminal containing an affected facility shall comply with the requirements of this section.

(a) Each affected facility shall be equipped with a vapor collection system designed to collect the total organic compounds vapors displaced from tank trucks during product loading.

(b) The emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline tank trucks are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded, except as noted in paragraph (c) of this section.

(c) For each affected facility equipped with an existing vapor processing system, the emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline tank trucks are not to exceed 80 milligrams of total organic compounds per liter of gasoline loaded.

(d) Each vapor collection system shall be designed to prevent any total organic compounds vapors collected at one loading rack from passing to another loading rack.

(e) Loadings of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures:

(1) The owner or operator shall obtain the vapor tightness documentation described in §60.505(b) for each gasoline tank truck which is to be loaded at the affected facility.

(2) The owner or operator shall require the tank identification number to be recorded as each gasoline tank truck is loaded at the affected facility.

(3)(i) The owner or operator shall cross-check each tank identification number obtained in paragraph (e) (2) of this section with the file of tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded, unless either of the following conditions is maintained:

(A) If less than an average of one gasoline tank truck per month over the last 26 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed each quarter; or

(B) If less than an average of one gasoline tank truck per month over the last 52 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed semiannually.

(ii) If either the quarterly or semiannual cross-check provided in paragraphs (e)(3)(i) (A) through (B) of this section reveals that these conditions were not maintained, the source must return to biweekly monitoring until such time as these conditions are again met.

(4) The terminal owner or operator shall notify the owner or operator of each non-vapor-tight gasoline tank truck loaded at the affected facility within 1 week of the documentation cross-check in paragraph (e) (3) of this section.

(5) The terminal owner or operator shall take steps assuring that the nonvapor-tight gasoline tank truck will not be reloaded at the affected facility until vapor tightness documentation for that tank is obtained.

(6) Alternate procedures to those described in paragraphs (e)(1) through (5) of this section for limiting gasoline tank truck loadings may be used upon application to, and approval by, the Administrator.

(f) The owner or operator shall act to assure that loadings of gasoline tank trucks at the affected facility are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.

(g) The owner or operator shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the affected facility. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the affected loading racks.

(h) The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading. This level is not to be exceeded when measured by the procedures specified in §60.503(d).

(i) No pressure-vacuum vent in the bulk gasoline terminal's vapor collection system shall begin to open at a system pressure less than 4,500 pascals (450 mm of water).

(j) Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of this paragraph, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected.

[48 FR 37590, Aug. 18, 1983; 48 FR 56580, Dec. 22, 1983, as amended at 54 FR 6678, Feb. 14, 1989; 64 FR 7466, Feb. 12, 1999]

§ 60.503 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). The three-run requirement of §60.8(f) does not apply to this subpart.

(b) Immediately before the performance test required to determine compliance with §60.502 (b), (c), and (h), the owner or operator shall use Method 21 to monitor for leakage of vapor all potential sources in the terminal's vapor collection system equipment while a gasoline tank truck is being loaded. The owner or operator shall repair all leaks with readings of 10,000 ppm (as methane) or greater before conducting the performance test.

(c) The owner or operator shall determine compliance with the standards in §60.502 (b) and (c) as follows:

(1) The performance test shall be 6 hours long during which at least 300,000 liters of gasoline is loaded. If this is not possible, the test may be continued the same day until 300,000 liters of gasoline is loaded or the test may be resumed the next day with another complete 6-hour period. In the latter case, the 300,000-liter criterion need not be met. However, as much as possible, testing should be conducted during the 6-hour period in which the highest throughput normally occurs.

(2) If the vapor processing system is intermittent in operation, the performance test shall begin at a reference vapor holder level and shall end at the same reference point. The test shall include at least two startups and shutdowns of the vapor processor. If this does not occur under automatically controlled operations, the system shall be manually controlled.

(3) The emission rate (E) of total organic compounds shall be computed using the following equation:

$$E = K \sum_{i=1}^n (V_{esi} C_{ei}) / (L 10^6)$$

where:

E=emission rate of total organic compounds, mg/liter of gasoline loaded.

V_{esi} =volume of air-vapor mixture exhausted at each interval "i", scm.

C_{ei} =concentration of total organic compounds at each interval "i", ppm.

L=total volume of gasoline loaded, liters.

n=number of testing intervals.

i=emission testing interval of 5 minutes.

K=density of calibration gas, 1.83×10^6 for propane and 2.41×10^6 for butane, mg/scm.

(4) The performance test shall be conducted in intervals of 5 minutes. For each interval "i", readings from each measurement shall be recorded, and the volume exhausted (V_{esi}) and the corresponding average total organic compounds concentration (C_{ei}) shall be determined. The sampling system response time shall be considered in determining the average total organic compounds concentration corresponding to the volume exhausted.

(5) The following methods shall be used to determine the volume (V_{esi}) air-vapor mixture exhausted at each interval:

(i) Method 2B shall be used for combustion vapor processing systems.

(ii) Method 2A shall be used for all other vapor processing systems.

(6) Method 25A or 25B shall be used for determining the total organic compounds concentration (C_{ei}) at each interval. The calibration gas shall be either propane or butane. The owner or operator may exclude the methane and ethane content in the exhaust vent by any method (e.g., Method 18) approved by the Administrator.

(7) To determine the volume (L) of gasoline dispensed during the performance test period at all loading racks whose vapor emissions are controlled by the processing system being tested, terminal records or readings from gasoline dispensing meters at each loading rack shall be used.

(d) The owner or operator shall determine compliance with the standard in §60.502(h) as follows:

(1) A pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument), capable of measuring up to 500 mm of water gauge pressure with ± 2.5 mm of water precision, shall be calibrated and installed on the terminal's vapor collection system at a pressure tap located as close as possible to the connection with the gasoline tank truck.

(2) During the performance test, the pressure shall be recorded every 5 minutes while a gasoline truck is being loaded; the highest instantaneous pressure that occurs during each loading shall also be recorded. Every loading position must be tested at least once during the performance test.

(e) The performance test requirements of paragraph (c) of this section do not apply to flares defined in §60.501 and meeting the requirements in §60.18(b) through (f). The owner or operator shall demonstrate that the flare and associated vapor collection system is in compliance with the requirements in §60.18(b) through (f) and 60.503(a), (b), and (d).

(f) The owner or operator shall use alternative test methods and procedures in accordance with the alternative test method provisions in §60.8(b) for flares that do not meet the requirements in §60.18(b).

[54 FR 6678, Feb. 14, 1989; 54 FR 21344, Feb. 14, 1989, as amended at 68 FR 70965, Dec. 19, 2003]

§ 60.504 [Reserved]

§ 60.505 Reporting and recordkeeping.

(a) The tank truck vapor tightness documentation required under §60.502(e)(1) shall be kept on file at the terminal in a permanent form available for inspection.

(b) The documentation file for each gasoline tank truck shall be updated at least once per year to reflect current test results as determined by Method 27. This documentation shall include, as a minimum, the following information:

(1) Test title: Gasoline Delivery Tank Pressure Test—EPA Reference Method 27.

(2) Tank owner and address.

(3) Tank identification number.

(4) Testing location.

(5) Date of test.

(6) Tester name and signature.

(7) Witnessing inspector, if any: Name, signature, and affiliation.

(8) Test results: Actual pressure change in 5 minutes, mm of water (average for 2 runs).

(c) A record of each monthly leak inspection required under §60.502(j) shall be kept on file at the terminal for at least 2 years. Inspection records shall include, as a minimum, the following information:

(1) Date of inspection.

(2) Findings (may indicate no leaks discovered; or location, nature, and severity of each leak).

(3) Leak determination method.

(4) Corrective action (date each leak repaired; reasons for any repair interval in excess of 15 days).

(5) Inspector name and signature.

(d) The terminal owner or operator shall keep documentation of all notifications required under §60.502(e)(4) on file at the terminal for at least 2 years.

(e) As an alternative to keeping records at the terminal of each gasoline cargo tank test result as required in paragraphs (a), (c), and (d) of this section, an owner or operator may comply with the requirements in either paragraph (e)(1) or (2) of this section.

(1) An electronic copy of each record is instantly available at the terminal.

(i) The copy of each record in paragraph (e)(1) of this section is an exact duplicate image of the original paper record with certifying signatures.

(ii) The permitting authority is notified in writing that each terminal using this alternative is in compliance with paragraph (e)(1) of this section.

(2) For facilities that utilize a terminal automation system to prevent gasoline cargo tanks that do not have valid cargo tank vapor tightness documentation from loading (e.g., via a card lock-out system), a copy of the documentation is made available (e.g., via facsimile) for inspection by permitting authority representatives during the course of a site visit, or within a mutually agreeable time frame.

(i) The copy of each record in paragraph (e)(2) of this section is an exact duplicate image of the original paper record with certifying signatures.

(ii) The permitting authority is notified in writing that each terminal using this alternative is in compliance with paragraph (e)(2) of this section.

(f) The owner or operator of an affected facility shall keep records of all replacements or additions of components performed on an existing vapor processing system for at least 3 years.

[48 FR 37590, Aug. 18, 1983; 48 FR 56580, Dec. 22, 1983, as amended at 68 FR 70965, Dec. 19, 2003]

§ 60.506 Reconstruction.

For purposes of this subpart:

(a) The cost of the following frequently replaced components of the affected facility shall not be considered in calculating either the "fixed capital cost of the new components" or the "fixed capital costs that would be required to construct a comparable entirely new facility" under §60.15: pump seals, loading arm gaskets and swivels, coupler gaskets, overfill sensor couplers and cables, flexible vapor hoses, and grounding cables and connectors.

(b) Under §60.15, the "fixed capital cost of the new components" includes the fixed capital cost of all

depreciable components (except components specified in §60.506(a)) which are or will be replaced pursuant to all continuous programs of component replacement which are commenced within any 2-year period following December 17, 1980. For purposes of this paragraph, "commenced" means that an owner or operator has undertaken a continuous program of component replacement or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of component replacement.

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CERTIFICATE OF SERVICE

I, Pam Owen, hereby certify that a copy of this permit has been mailed by first class mail to Arkansas Terminaling and Trading, 701 South Robison Road, Texarkana, TX, 75504, on this 7th day of December, 2007.

Pam Owen
Pam Owen, AAI, Air Division