



Louisville Metro Air Pollution Control District
 850 Barret Avenue
 Louisville, Kentucky 40204-1745



Federally Enforceable District Origin Operating Permit (FEDOOP)

Permit No.: O-0225-15-F

Plant ID: 0225

Effective Date: xx/xx/2015

Expiration Date: xx/xx/2020

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

Citgo Petroleum
 4724 Campground Road
 Louisville, Kentucky 40216

The applicable procedures of District Regulation 2.17 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than twelve (12) months and no later than ninety (90) days prior to the expiration date.

Emission limitations to qualify for non-major status:

Pollutant:	VOC	Total HAP	Single HAP
Tons/year:	95	25	10

Application No.: 10787
 71836

Application Received: 01/18/2007
 05/29/2015

Permit Writer: Shannon Hosey

Date of Public Notice: 12/04/2015

{Manager1}
 Air Pollution Control Officer
 {date1}

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FEDOOP Permit Revisions/Changes

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
Initial	72-97-F	04/22/1997	03/16/1997	Initial	Entire Permit	Initial Permit Issuance
R1	72-97-F (R1)	04/04/2000	03/05/2000	Admin	General Conditions Pages 4-6	Incorporate revisions to General Conditions #4, #11, #12, and #13; New General Conditions #13 and #14
R2	72-97-F (R2)	06/19/2002	5/12/2002	Renewal	Entire Permit	Permit Renewal
R3	O-0225-15-F	xx/xx/2015	12/04/2015	Renewal	Entire Permit	Permit Renewal, incorporate construction permits 117-06-C, 400-05-C, 248-02-C, 56-04-C and 82-05-C

Construction Permit History

Permit No.	Issue Date	Description
117-06-C	04/30/2007	One (1) 8000 gallon vertical fixed roof tank for storage of diesel fuel additive Infineum R680
400-05-C	12/31/2006	One (1) 1000 gallon storage tank for gasoline additives
248-02-C	09/30/2003	Two (2) bulk storage tanks for storage of gasoline additive
56-04-C	4/30/2004	One (1) 557 gallon storage tank
82-05-C	3/31/2006	One (1) 1050 gallon storage tank designated as Tank #7

Abbreviations and Acronyms

AP-42	- AP-42, <i>Compilation of Air Pollutant Emission Factors, published by U.S.EPA</i>
APCD	- Louisville Metro Air Pollution Control District
BAC	- Benchmark Ambient Concentration
BACT	- Best Available Control Technology
Btu	- British thermal unit
CEMS	- Continuous Emission Monitoring System
CFR	- Code of Federal Regulations
CO	- Carbon monoxide
District	- Louisville Metro Air Pollution Control District
EA	- Environmental Acceptability
gal	- U.S. fluid gallons
GHG	- Greenhouse Gas
HAP	- Hazardous Air Pollutant
HCl	- Hydrogen chloride
Hg	- Mercury
hr	- Hour
in.	- Inches
lbs	- Pounds
l	- Liter
LMAPCD	- Louisville Metro Air Pollution Control District
mmHg	- Millimeters of mercury column height
MM	- Million
NAICS	- North American Industry Classification System
NO _x	- Nitrogen oxides
PM	- Particulate Matter
PM ₁₀	- Particulate Matter less than 10 microns
PM _{2.5}	- Particulate Matter less than 2.5 microns
ppm	- parts per million
PSD	- Prevention of Significant Deterioration
psia	- Pounds per square inch absolute
QA	- Quality Assurance
RACT	- Reasonably Available Control Technology
SIC	- Standard Industrial Classification
SIP	- State Implementation Plan
SO ₂	- Sulfur dioxide
STAR	- Strategic Toxic Air Reduction
TAC	- Toxic Air Contaminant
UTM	- Universal Transverse Mercator
VOC	- Volatile Organic Compound
w.c.	- Water column
year	- Any period of twelve consecutive months, unless "calendar year" is specified
yr	- Year, or any 12 consecutive-month period, as determined by context

Preamble

This permit covers only the provisions of Kentucky Revised Statutes Chapter 77 Air Pollution Control, the regulations of the Louisville Metro Air Pollution Control District (District) and, where appropriate, certain federal regulations. The issuance of this permit does not exempt any owner or operator to whom it has been issued from prosecution on account of the emission or issuance of any air contaminant caused or permitted by such owner or operator in violation of any of the provisions of KRS 77 or District regulations. Any permit shall be considered invalid if timely payment of annual fees is not made. The permit contains general permit conditions and specific permit conditions. General conditions are applicable unless a more stringent requirement is specified elsewhere in the permit.

General Conditions

1. The owner or operator shall comply with all General Conditions herein and all terms and conditions in the referenced process/process equipment list.
2. All terms and conditions in this FEDOOP are enforceable by EPA, except those terms and conditions specified as District-only enforceable, and those which are not required pursuant to the Clean Air Act Amendments of 1990 (CAAA) or any of the Act's applicable requirements.
3. All application forms, reports, compliance certifications, and other relevant information submitted to the District shall be certified by a responsible official. If a change in the responsible official (RO) occurs during the term of this permit, or if an RO is added, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days of such change or addition.
4. The owner or operator shall submit an annual compliance certification, signed by the responsible official, to the District, on or before April 15 of the year following the year for which the certification applies. This certification shall include completion of District Form 9440-O.
5. Periodic testing, instrumental monitoring, or non-instrumental monitoring, which may include record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstrating continuing compliance with the terms and conditions of this permit.
6. The owner or operator shall retain all records required by the District or any applicable requirement, including all required monitoring data and supporting information, for a period of five years from the date of the monitoring, sampling, measurement, report, or application, unless a longer time period for record retention is required by the District or an applicable requirement. Records shall be retrievable within a reasonable time and made available to the District, Kentucky Division for Air Quality, or the EPA upon request.
7. The owner or operator shall provide written notification to the District, and receive approval, prior to making any changes to existing equipment or processes that would result in emissions of any regulated pollutant in excess of the allowable emissions specified in this permit.
8. This permit may be reissued, revised, reopened, or revoked pursuant to District Regulation 2.17. Repeated violations of permit conditions are sufficient cause for revocation of this permit. The filing of a request by the owner or operator for any reissuance, revision, revocation, termination, or a notification of planned changes in equipment or processes, or anticipated noncompliance shall not alter any permit requirement.
9. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed either 10 tons per year, or such lesser quantity as

the EPA has established by rule, of any one Hazardous Air Pollutant (HAP) or 25 tons per year of all HAPs combined. Fugitive HAP emissions shall be included in this limit. HAPs are listed in Section 112(b) of the CAAA and as amended in 40 CFR 63, Subpart C.

10. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed 100 tons per year of any regulated pollutant, including particulate matter, PM₁₀, PM_{2.5}, sulfur dioxide, carbon monoxide, nitrogen oxides, lead, hydrogen sulfide, gaseous fluorides, total fluorides, or Volatile Organic Compounds (VOC); any pollutant subject to any standard in District Regulation 7.02; any substance listed in sections 112(r), 602(a) and 602(b) of the CAAA; or any combination of greenhouse gasses whose combined global warming potential equals or exceeds 100,000 tons CO₂-equivalent, as defined in 40 CFR 98). Fugitive emissions shall be included in these limits for source categories listed in District Regulation 2.16.
11. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month.
12. Unless specified elsewhere in this permit, the owner or operator shall submit annual reports demonstrating compliance with the emission limitations specified. The report shall contain monthly and consecutive 12-month totals for each pollutant that has a federally enforceable limitation on the potential to emit. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement or a declaration that there were no such deviations. All annual compliance reports shall include the statement "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete" and the signature and title of a responsible official of the company. The report must be postmarked no later than March 1 of the year following the calendar year covered in the annual report.
13. The owner or operator shall comply with all applicable requirements of the following federally enforceable District Regulations:

Regulation	Title
1.01	General Application of Regulations and Standards
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance with Emissions Standards and Maintenance Requirements
1.06	Source Self-Monitoring, Emissions Inventory Development and Reporting
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning

Regulation	Title
1.14	Control of Fugitive Particulate Emissions
2.01	General Application (Permit Requirements)
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements
2.07	Public Notification for Title V, PSD, and Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.17	Federally Enforceable District Origin Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions

14. The owner or operator shall comply with all applicable requirements of the following District-only enforceable regulations:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors in the Ambient Air
2.08	Fees
5.00	Definitions
5.01	General Provisions
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
5.14	Hazardous Air Pollutants and Source Categories
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants
7.02	Adoption of Federal New Source Performance Standards

15. The owner or operator shall submit emission inventory reports, as required by Regulation 1.06, if so notified by the District.
16. The owner or operator shall submit timely reports of abnormal conditions or operational

changes that may cause excess emissions, as required by Regulation 1.07.

17. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit shall be submitted to:

*Air Pollution Control District
Room 205
850 Barret Ave
Louisville, KY 40204-1745*

Plant-Wide¹: Distribution of gasoline products

Plant-Wide Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.05	Compliance with Emission Standards and Maintenance Requirements	1 through 5
2.17	Federally Enforceable District Origin Operating Permits	1 through 9
40 CFR 63 Subpart A	General Provisions	1 through 16
40 CFR Part 63 Subpart BBBBBB	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities	11080-11085, 11087-11089, 11092-11095, 11098-11100

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.02	Adoption of National Emission Standards for Hazardous Air Pollutants	1, 3.95 and 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

¹ This section consists of regulations that apply to multiple emission units found at the facility. Regulation 40 CFR Part 63 Subpart BBBBBB is applicable to the equipment found in Emission Units U2, Storage Tanks, as well as U3, Truck Loading Rack. In addition, Regulation 40 CFR Part 63 Subpart BBBBBB includes the fugitive components in gasoline service. Emission Unit U1, Chloroform Storage Tanks, is not subject to 40 CFR Part 63 Subpart BBBBBB.

Plant-Wide Specific Conditions**S1. Standards** (Regulation 2.17, section 5.1)**a. VOC**

- i. The owner or operator shall comply with the Regulation 1.05 Compliance Plan, which outlines various inspections and preventative maintenance procedures. (Regulation 2.17, section 5.2)
 - 1) Perform monthly leak detection on tanks in gasoline service, vapor processing system and loading rack. (Regulation 1.05 Compliance Plan)
 - 2) Perform inspections for the gasoline floating roof storage tanks and the fixed roof storage tank. (Regulation 1.05 Compliance Plan)
 - 3) For the tank truck loading the following shall be performed: vapor tightness checks, Kentucky pressure vacuum test sticker, tank identification number, initial trailer inspection and driver training. (Regulation 1.05 Compliance Plan)
- ii. The owner or operator shall not allow or cause the plant-wide emissions of VOC to equal or exceed 95 tons during any consecutive 12-month period.² (Regulation 2.17, section 5.1)

b. HAP

- i. The owner or operator shall not allow or cause the plant-wide emissions of any single HAP to equal or exceed 10 tons during any consecutive 12-month period. (Regulation 2.17, section 5.1)
- ii. The owner or operator shall not allow or cause the plant-wide total HAP emissions to equal or exceed 25 tons during any consecutive 12-month period. (Regulation 2.17, section 5.1)
- iii. The owner or operator must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance procedures and records, and inspection of the source. (40 CFR 63.11085(a))

² The Company requested the 95 ton per 12 consecutive month limit in the application received on 1/18/2007. Since all petroleum products delivered to the terminal are subsequently loaded onto trucks, limiting the loading rack throughput essentially creates a “bottleneck” that limits the storage tank throughput as well. Therefore, the entire terminal is limited to 95 tons of VOCs per year.

- iv. For a gasoline storage tank with a capacity of greater than or equal to 75 m³ and not meeting any of the criteria specified in item 1 of this Table 1 to Subpart BBBB, the owner or operator must: (Table 1, 40 CFR 63.11087(a))
- 1) Equip each external floating roof gasoline storage tank according to the requirements in 40 CFR 60.112b(a)(2) of Subpart Kb, except that the requirements of 40 CFR 60.112b(a)(2)(ii) of Subpart Kb shall only be required if such storage tank does not currently meet the requirements of 40 CFR 60.112b(a)(2)(i) of Subpart Kb; (Table 1, 40 CFR 63.11087(a))
 - (a) 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. (40 CFR 60.112b(a)(2)(i))
 - (i) 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. (40 CFR 60.112b(a)(2)(i)(A))
 - (ii) 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\(b\)\(4\)](#). (40 CFR 60.112b(a)(2)(i)(B))
 - (b) 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. (40 CFR 60.112b(a)(2)(iii))
 - (c) Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in §§60.113b(b)(4) (i) and (ii): (40 CFR 60.113b(b)(4))
 - (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. (40 CFR 60.113b(b)(4)(i))

- (1) 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. (40 CFR 60.113b(b)(4)(i)(A))
 - (2) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope. (40 CFR 60.113b(b)(4)(i)(B))
 - (ii) The secondary seal is to meet the following requirements: (40 CFR 60.113b(b)(4)(ii))
 - (1) 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 §60.113b(b)(2)(iii). (40 CFR 60.113b(b)(4)(ii)(A))
 - (2) 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. (40 CFR 60.113b(b)(4)(ii)(B))
 - (3) There are to be no holes, tears, or other openings in the seal or seal fabric. (40 CFR 60.113b(b)(4)(ii)(C))
 - (iii) If a failure that is detected during inspections required in §60.113b(b)(1) 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. (40 CFR 60.113b(b)(4)(iii))
- v. For a bulk gasoline terminal loading rack(s) with a gasoline throughput (total of all racks) of 250,000 gallons per day³, or greater, then the owner or operator must: (Table 2, 40 CFR 63.11088(a))

³ Gallons per day is calculated by summing the current day's throughput, plus the throughput for the previous 364 days, and then dividing that sum by 365.

- 1) Equip your loading rack(s) with a vapor collection system designed to collect the TOC vapors displaced from cargo tanks during product loading; and (Table 2, 40 CFR 63.11088(a))
 - 2) Reduce emissions of TOC to less than or equal to 80 mg/l of gasoline loaded into gasoline cargo tanks at the loading rack; and (Table 2, 40 CFR 63.11088(a))
 - 3) Design and operate the vapor collection system to prevent any TOC vapors collected at one loading rack or lane from passing through another loading rack or lane to the atmosphere; and (Table 2, 40 CFR 63.11088(a))
 - 4) Limit the loading of gasoline into gasoline cargo tanks that are vapor tight using the procedures specified in 40 CFR 60.502(e) through (j) of Subpart XX. For the purposes of this section, the term "tank truck" as used in 40 CFR 60.502(e) through (j) of Subpart XX means "cargo tank" as defined in 40 CFR 63.11100 of Subpart BBBBBB. (Table 2, 40 CFR 63.11088(a))
- vi. The owner or operator must comply with the requirements of this subpart, specified in 40 CFR 63.11083 of Subpart BBBBBB⁴, except that storage vessels equipped with floating roofs and not meeting the requirements of paragraph (a) of 40 CFR 63.11087 must be in compliance at the first degassing and cleaning activity after January 10, 2011 or by January 10, 2018, whichever is first. (40 CFR 63.11087(b), 63.11088(c), and 63.11089(e))
- vii. The owner or operator of a bulk gasoline terminal loading rack(s) with a gasoline throughput (total of all racks) of less than 250,000 gallons per day⁵ must meet each management practice. (Table 2, Option 2, 40 CFR 63.11088(a))
- 1) Use submerged filling with a submerged fill pipe that is no more than 6 inches from the bottom of the cargo tank; and (Table 2, Option 2.(a), 40 CFR 63.11088(a))
 - 2) Make records available within 24 hours of a request by the Administrator to document your gasoline throughput. (Table 2, Option 2.(b), 40 CFR 63.11088(a))

c. **TAC**

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by

⁴ If the owner or operator has an existing affected source, one must comply with the standards in this subpart no later than January 10, 2011. (40 CFR 63.11083(b))

⁵ Gallons per day is calculated by summing the current day's throughput, plus the throughput for the previous 364 days, and then dividing that sum by 365.

modeling or determined by the District to be *de minimis*. (Regulations 5.00 and 5.21) (See Plant-Wide Comment)

S2. Monitoring and Record Keeping (Regulation 2.17, section 5.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. VOC

- i. The owner or operator shall perform and keep records of the results for the following:⁶ (Regulation 2.17, section 5.2)
 - 1) Monthly leak detection on tanks in gasoline service, vapor processing system and loading rack. (Regulation 1.05 Compliance Plan)
 - 2) Inspections for the gasoline floating roof storage tanks and the fixed roof storage tank. (Regulation 1.05 Compliance Plan)
 - 3) For the tank truck loading the following shall be performed: vapor tightness checks, Kentucky pressure vacuum test sticker, tank identification number, initial trailer inspection and driver training. (Regulation 1.05 Compliance Plan)
- ii. The owner or operator shall maintain records, including calculations, of their calendar month and consecutive 12-month, plant-wide VOC emissions. (Regulation 2.17, section 5.2)

b. HAP

- i. The owner or operator shall monthly maintain records, including calculations, of their calendar month and consecutive 12-month, plant-wide combined and single HAP emissions. (Regulation 2.17, section 5.2)
- ii. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in 40 CFR 63.11100 of Subpart BBBBBB. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. As defined in 40 CFR 63.11100 of Subpart BBBBBB, equipment means each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in the gasoline liquid transfer and vapor collection systems. This definition also includes the entire vapor processing system except the exhaust port(s) or stack(s). (40 CFR 63.11089(a))
- iii. A log book shall be used and shall be signed by the owner or operator at the completion of each inspection required by §63.11089(a). A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. For facilities electing to implement an instrument program under 40 CFR

⁶ The Regulation 1.05 compliance plan was submitted by the company on June 8, 2015.

- 63.11089, the record shall contain a full description of program. (40 CFR 63.11089(b) and 40 CFR 63.11094(d))
- iv. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak, except as provided in 40 CFR 63.11089(d). (40 CFR 63.11089(c))
 - v. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report specified in 40 CFR 63.11095(b), the reason(s) why the repair was not feasible and the date each repair was completed. (40 CFR 63.11089(d))
 - vi. The owner or operator shall keep records as specified in 40 CFR 60.115b of Subpart Kb if complying with option2(c) in Table 1 of Subpart BBBBBBB, except records shall be kept for at least 5 years. (40 CFR 63.11094(a))
 - vii. Each owner or operator of a bulk gasoline terminal subject to the provisions of this subpart shall keep records of the test results for each gasoline cargo tank loading at the facility as specified in paragraphs (b)(2) through (3) of 40 CFR 63.11094. (40 CFR 63.11094(b))
 - 1) Annual certification testing performed under §63.11092(f)(1) and periodic railcar bubble leak testing performed under §63.11092(f)(2). (40 CFR 63.11094(b)(1))
 - 2) The documentation file shall be kept up-to-date for each gasoline cargo tank loading at the facility. The documentation for each test shall include, as a minimum, the following information: (40 CFR 63.11094(b)(2))
 - (a) *Name of test:* Annual Certification Test—Method 27. (40 CFR 63.11094(b)(2)(i))
 - (b) Cargo tank owner's name and address. (40 CFR 63.11094(b)(2)(ii))
 - (c) Cargo tank identification number. (40 CFR 63.11094(b)(2)(iii))
 - (d) Test location and date. (40 CFR 63.11094(b)(2)(iv))
 - (e) Tester name and signature. (40 CFR 63.11094(b)(2)(v))
 - (f) *Witnessing inspector, if any:* Name, signature, and affiliation. (40 CFR 63.11094(b)(2)(vi))
 - (g) *Vapor tightness repair:* Nature of repair work and when performed in relation to vapor tightness testing. (40 CFR 63.11094(b)(2)(vii))

- (h) *Test results:* Test pressure; pressure or vacuum change, mm of water; time period of test; number of leaks found with instrument; and leak definition. (40 CFR 63.11094(b)(2)(viii))
- viii. As an alternative to keeping records at the terminal of each gasoline cargo tank test result as required in 40 CFR 63.11094(b), an owner or operator may comply with the either of the following requirements: (40 CFR 63.11094(c))
 - 1) An electronic copy of each record is instantly available at the terminal. (40 CFR 63.11094(c)(1))
 - (a) The copy of each record in paragraph (c)(1) of 40 CFR 63.11094 is an exact duplicate image of the original paper record with certifying signatures. (40 CFR 63.11094(c)(1)(i))
 - (b) The Administrator is notified in writing that each terminal using this alternative is in compliance with 40 CFR 63.11094(c)(1). (40 CFR 63.11094(c)(1)(ii))
 - 2) For facilities that use 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 the Administrator's delegated representatives during the course of a site visit, or within a mutually agreeable time frame. (40 CFR 63.11094(c)(2))
 - (a) The copy of each record in paragraph (c)(2) of 40 CFR 63.11094 is an exact duplicate image of the original paper record with certifying signatures. (40 CFR 63.11094(c)(2)(i))
 - (b) The Administrator is notified in writing that each terminal using this alternative is in compliance with paragraph (c)(2) of 40 CFR 63.11094. (40 CFR 63.11094(c)(2)(ii))
- ix. Each owner or operator of an affected source subject to equipment leak inspections under 40 CFR 63.11089 shall record in the log book for each leak that is detected the information specified in paragraphs (e)(1) through (7) of 40 CFR 63.11094. (40 CFR 63.11094(e))
 - 1) The equipment type and identification number. (40 CFR 63.11094(e)(1))
 - 2) The nature of the leak (i.e., vapor or liquid) and the method of detection (i.e., sight, sound, or smell). (40 CFR 63.11094(e)(2))
 - 3) The date the leak was detected and the date of each attempt to repair the leak. (40 CFR 63.11094(e)(3))

- 4) Repair methods applied in each attempt to repair the leak. (40 CFR 63.11094(e)(4))
 - 5) "Repair delayed" and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak. (40 CFR 63.11094(e)(5))
 - 6) The expected date of successful repair of the leak if the leak is not repaired within 15 days. (40 CFR 63.11094(e)(6))
 - 7) The date of successful repair of the leak. (40 CFR 63.11094(e)(7))
- x. Each owner or operator of a bulk gasoline terminal subject to the provisions of this subpart shall: (40 CFR 63.11094(f))
- 1) Keep an up-to-date, readily accessible record of the continuous monitoring data required under 40 CFR 63.11092(b) or 40 CFR 63.11092(e) of Subpart BBBBBB. This record shall indicate the time intervals during which loadings of gasoline cargo tanks have occurred or, alternatively, shall record the operating parameter data only during such loadings. The date and time of day shall also be indicated at reasonable intervals on this record. (40 CFR 63.11094(f)(1))
 - 2) Record and report simultaneously with the Notification of Compliance Status required under 40 CFR 63.11093(b) of Subpart BBBBBB: (40 CFR 63.11094(f)(2))
 - (a) All data and calculations, engineering assessments, and manufacturer's recommendations used in determining the operating parameter value under 40 CFR 63.11092(b) or 40 CFR 63.11092(e) of Subpart BBBBBB; and (40 CFR 63.11094(f)(2)(i))
 - 3) Keep an up-to-date, readily accessible copy of the monitoring and inspection plan required under 40 CFR 63.11092(b)(1)(i)(B)(2) or 40 CFR 63.11092(b)(1)(iii)(B)(2) of Subpart BBBBBB. (40 CFR 63.11094(f)(3))
 - 4) Keep an up-to-date, readily accessible record of all system malfunctions, as specified in 40 CFR 63.11092(b)(1)(i)(B)(2)(v) or 40 CFR 63.11092(b)(1)(iii)(B)(2)(v) of Subpart BBBBBB. (40 CFR 63.11094(f)(4))
 - 5) If an owner or operator requests approval to use a vapor processing system or monitor an operating parameter other than those specified in 40 CFR 63.11092(b) of Subpart BBBBBB, the owner or operator shall submit a description of planned reporting and recordkeeping procedures. (40 CFR 63.11094(f)(5))
- xi. Each owner or operator of an affected source under Subpart BBBBBBB shall keep records as specified below: (40 CFR 63.11094(g))

- 1) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment. (40 CFR 63.11094(g)(1))
- 2) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.11085(a) of Subpart BBBBBB, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.11094(g)(2))

c. **TAC**

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if a new TAC is introduced or the content of a TAC in a raw material increases above *de minimis* uncontrolled.

S3. **Reporting** (Regulation 2.17, section 5.2)

a. **VOC**

- i. The owner or operator shall report their calendar month and consecutive 12-month, plant-wide VOC emissions to demonstrate that the plant-wide VOC emission standard has not been exceeded. (Regulation 2.17, section 5.2)
- ii. The owner or operator shall identify all periods of non-conformance with the Regulation 1.05 compliance plan during the reporting period. The report shall include the following: (Regulation 2.17, section 5.2)
 - 1) Emission Unit ID number;
 - 2) The date and duration (including start and end date) during which differing situation from the Regulation 1.05 compliance plan occurred;
 - 3) The situation that occurred;
 - 4) Summary information on the cause or reason for the situation;
 - 5) Corrective action taken to minimize the extent and duration of each non-conforming situation;
 - 6) Measures implemented to prevent reoccurrence of the situation that resulted in non-conformance;
- iii. If no non-conforming events occurred during the reporting period, the annual compliance report shall contain a negative declaration that there were no periods of non-conformance from the Regulation 1.05 compliance plan during the reporting period.

- iv. The owner or operator shall identify all periods when the plant-wide VOC emission standard has been exceeded during the reporting period. The report shall include the following: (Regulation 2.17, section 5.2)
 - 1) Emission Unit ID number;
 - 2) The date and duration (including start and end date) during which an exceedance from the emission limit occurred;
 - 3) The quantity of excess emissions;
 - 4) Summary information on the cause or reason for excess emissions;
 - 5) Corrective action taken to minimize the extent and duration of each excess emissions event;
 - 6) Measures implemented to prevent reoccurrence of the situation that resulted in excess emissions;
 - 7) If no emission limits were exceeded during the reporting period, the annual compliance report shall contain a negative declaration that there were no periods of exceedance from the emission limitations during the reporting period.

b. HAP

- i. The owner or operator shall report their calendar month and consecutive 12-month, plant-wide combined and single HAP emissions to demonstrate that the plant-wide HAP emission standards have not been exceeded. (Regulation 2.17, section 5.2)
- ii. Each owner or operator of an affected source under this subpart must submit an Initial Notification as specified in the General Provisions of 40 CFR 63.9(b) (Subpart A).⁷ (40 CFR 63.11093(a))
- iii. Each owner or operator of an affected source under this subpart must submit a Notification of Compliance Status as specified in the General Provisions of 40 CFR 63.9(h) (Subpart A). The Notification of Compliance Status must specify which of the compliance options included in Table 1 to this subpart is used to comply with Subpart BBBBBBB. If your gasoline storage tank is subject to, and complies with, the control requirements of 40 CFR Part 60, subpart Kb, your storage tank will be deemed in compliance with this section. You must report this determination in the Notification of Compliance Status report.⁴ ((40 CFR 63.11093(b))
- iv. Each owner or operator of any affected source under this subpart must submit additional notifications specified in the General Provisions of 40 CFR 63.9, (Subpart A) as applicable. (40 CFR 63.11093(d))

⁷ An Initial Notification of Compliance Status for 40 CFR Part 63, Subpart BBBBBBB was submitted on April 17, 2008.

- v. Each owner or operator of a bulk terminal or a pipeline breakout station subject to the control requirements of this subpart shall include in a semiannual compliance report to the Administrator the following information, as applicable: (40 CFR 63.11095(a))
- 1) For storage vessels, if you are complying with option2(c) in Table 1 of Subpart BBBBBBB, the information specified in 40 CFR 60.115b(b)) of Subpart Kb (40 CFR 63.11095(a)(1))
 - (a) Furnish the District 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 \(b\)\(4\)](#) (40 CFR 60.115b(b)(1))
 - (b) Within 60 days of performing the seal gap measurements required by § [60.113b\(b\)\(1\)](#), furnish the District with a report that contains: (40 CFR 60.115b(b)(2))
 - (i) The date of measurement. (40 CFR 60.115b(b)(2)(i))
 - (ii) The raw data obtained in the measurement. (40 CFR 60.115b(b)(2)(ii))
 - (iii) The calculations described in § [60.113b \(b\)\(2\) and \(b\)\(3\)](#). (40 CFR 60.115b(b)(3)(iii))
 - (c) 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 \(b\)\(3\)](#).
 - (d) 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.
 - 2) For loading racks, each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility. (40 CFR 63.11095(a)(2))
 - 3) For equipment leak inspections, the number of equipment leaks not repaired within 15 days after detection. (40 CFR 63.11095(a)(3))

- vi. Each owner or operator of an affected source subject to the control requirements of this subpart shall submit an excess emissions report to the Administrator at the time the semiannual compliance report is submitted. Excess emissions events under this subpart, and the information to be included in the excess emissions report, are specified in paragraphs (b)(1) through (5) of 40 CFR 63.11095.(40 CFR 63.11095(b))
- 1) Each instance of a non-vapor-tight gasoline cargo tank loading at the facility in which the owner or operator failed to take steps to assure that such cargo tank would not be reloaded at the facility before vapor tightness documentation for that cargo tank was obtained. (40 CFR 63.11095(b)(1))
 - 2) Each reloading of a non-vapor-tight gasoline cargo tank at the facility before vapor tightness documentation for that cargo tank is obtained by the facility in accordance with 40 CFR 63.11094(b) of Subpart BBBB. (40 CFR 63.11095(b)(2))
 - 3) Each exceedance or failure to maintain, as appropriate, the monitored operating parameter value determined under 40 CFR 63.11092(b) of Subpart BBBB. The report shall include the monitoring data for the days on which exceedances or failures to maintain have occurred, and a description and timing of the steps taken to repair or perform maintenance on the vapor collection and processing systems or the CMS. (40 CFR 63.11095(b)(3))
 - 4) Each instance in which malfunctions discovered during the monitoring and inspections required under 40 CFR 63.11092(b)(1)(i)(B)(2) and (b)(1)(iii)(B)(2) of Subpart BBBB were not resolved according to the necessary corrective actions described in the monitoring and inspection plan. The report shall include a description of the malfunction and the timing of the steps taken to correct the malfunction. (40 CFR 63.11095(b)(4))
 - 5) For each occurrence of an equipment leak for which no repair attempt was made within 5 days or for which repair was not completed within 15 days after detection: (40 CFR 63.11095(b)(5))
 - (a) The date on which the leak was detected; (40 CFR 63.11095(b)(5)(i))
 - (b) The date of each attempt to repair the leak; (40 CFR 63.11095(b)(5)(ii))
 - (c) The reasons for the delay of repair; and (40 CFR 63.11095(b)(5)(iii))
 - (d) The date of successful repair. (40 CFR 63.11095(b)(5)(iv))
- vii. Each owner or operator of a bulk gasoline plant or a pipeline pumping station shall submit a semiannual excess emissions report, including the information specified in paragraphs (a)(3) and (b)(5) of this section, only

for a 6-month period during which an excess emission event has occurred. If no excess emission events have occurred during the previous 6-month period, no report is required. (40 CFR 63.11095(c))

- viii. Each owner or operator of an affected source under this subpart shall submit a semiannual report including the number, duration, and a brief description of each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.11085(a) of Subpart BBBB, including actions taken to correct a malfunction. The report may be submitted as a part of the semiannual compliance report, if one is required. Owners or operators of affected bulk plants and pipeline pumping stations are not required to submit reports for periods during which no malfunctions occurred. (40 CFR 63.11095(d))

c. **TAC**

- i. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- ii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)
- iii. The owner or operator shall submit the re-evaluated EA demonstration to the District within 6 months after a change of a raw material as described in S2.c.ii.

S4. **Testing** (Regulation 2.17, section 5.2)

a. **VOC**

There are no routine testing requirements in regard to this pollutant for this emission unit.

b. **HAP**

- i. The owner or operator shall perform an EPA Reference Method performance test on the inlet and outlet of the control device or emission point within 180 day of starting the use of gasoline. The test shall be performed at 90% or higher of maximum capacity, or allowable/permitted capacity, or at a level of capacity which results in the greatest emissions and is representative of the operations. Failure to perform the test, at

maximum capacity, allowable/permitted capacity, or at a level of capacity which resulted in the greatest emissions, may necessitate a re-test or necessitate a revision of the allowable/permitted capacity of the process equipment depending upon the difference between the testing results and the limit.

- ii. The owner or operator shall submit written compliance test plans (protocol) for the control efficiency. They shall include the EPA test methods that will be used for Click here to enter text. compliance testing, the process operating parameters that will be monitored during the performance test, and the control device performance indicators (e.g. pressure drop, minimum combustion chamber temperature) that will be monitored during the performance test. The compliance test plans shall be furnished to the District at least 30 days prior to the actual date of the performance test. Attached to the permit is a [Protocol Checklist](#) for a Performance Test with the information to be submitted in the protocol.
- iii. The owner or operator shall be responsible for obtaining and analyzing audit samples when the EPA Reference Method is used to analyze samples to demonstrate compliance with the source's emission regulation. The audit samples shall be available for verification by the District during the onsite testing.
- iv. The owner or operator shall provide the District at least 10 days prior notice of any performance test to afford the District the opportunity to have an observer present.
- v. The owner or operator shall furnish the District with a written report of the results of the performance test within 60 days following the actual date of completion of the performance test.
- vi. The owner or operator shall provide written notification to the District of the actual date of achieving normal operation. The written notification shall be postmarked within 15 days after achieving normal operation.
- vii. Each owner or operator of an affected bulk gasoline terminal under this subpart must submit a Notification of Performance Test, as specified in the General Provisions of 40 CFR 63.9(e) (Subpart A), prior to initiating testing required by 40 CFR 63.11092(a) or 40 CFR 63.11092(b) of Subpart BBBBBB. (40 CFR 63.11093(c))
- viii. Each owner or operator of a bulk gasoline terminal subject to the 80 mg/l emission standard for bulk terminal gasoline loading rack(s) with a gasoline throughput of 250,000 gallons per day or greater must comply with the requirements in in 40 CFR 63.11092(a). (40 CFR 63.11092(a))
 - 1) Conduct a performance test on the vapor processing and collection systems according to either of the following: (40 CFR 63.11092(a)(1))
 - (a) Use the test methods and procedures found in 40 CFR 60.503 of Subpart XX, except a reading of 500 parts per

- million shall be used to determine the level of leaks to be repaired under 40 CFR 60.503(b). (40 CFR 63.11092(a)(1)(i))
- (b) Use alternative test methods and procedures in accordance with the alternative test method requirements in 40 CFR 63.7(f) of the General Provisions (Subpart A). (40 CFR 63.11092(a)(1)(ii))
- 2) If you are operating your gasoline loading rack in compliance with an enforceable State, local, or tribal rule or permit that requires your loading rack to meet an emission limit of 80 milligrams (mg), or less, per liter of gasoline loaded (mg/l), you may submit a statement by a responsible official of your facility certifying the compliance status of your loading rack in lieu of the test required in 40 CFR 63.11092(a)(1)). (40 CFR 63.11092(a)(2))
- ix. Each owner or operator of a bulk gasoline terminal subject to the provisions of this subpart shall install, calibrate, certify, operate, and maintain, according to the manufacturer's specifications, a continuous monitoring system (CMS) while gasoline vapors are displaced to the vapor processor systems, as specified in paragraphs (b)(1) through (5) of 40 CFR 63.11092. For each facility conducting a performance test under paragraph (a)(1) of 40 CFR 63.11092, and for each facility utilizing the provisions of paragraphs (a)(2) or (a)(3) of 40 CFR 63.11092, the CMS must be installed by January 10, 2011. (40 CFR 63.11092(b))
- 1) For each performance test conducted under 40 CFR 63.11092(a)(1)), the owner or operator shall determine a monitored operating parameter value for the vapor processing system using the procedures specified in paragraphs (b)(1)(i) through (iv) of this section. During the performance test, continuously record the operating parameter as specified below. (40 CFR 63.11092(b)(1))
 - (a) Where a carbon adsorption system is used, the owner or operator shall monitor the operation of the system as specified in paragraphs (b)(1)(i)(A) or (B) of this section. (40 CFR 63.11092(b)(1)(i))
 - (i) As an alternative to paragraph (b)(1)(i)(A) of 40 CFR 63.11092, you may choose to meet the requirements listed in paragraph (b)(1)(i)(B)(1) and (2) of 40 CFR 63.11092. (40 CFR 63.11092(b)(1)(i)(B))
 - (1) Carbon adsorption devices shall be monitored as specified in paragraphs (b)(1)(i)(B)(1)(i),(ii), and (iii) of 40 CFR 63.11092. (40 CFR 63.11092(b)(1)(i)(B)(1))

- a) Vacuum level shall be monitored using a pressure transmitter installed in the vacuum pump suction line, with the measurements displayed on a gauge that can be visually observed. Each carbon bed shall be observed during one complete regeneration cycle on each day of operation of the loading rack to determine the maximum vacuum level achieved.
(40 CFR 63.11092(b)(1)(i)(B)(1)(i))
 - b) Conduct annual testing of the carbon activity for the carbon in each carbon bed. Carbon activity shall be tested in accordance with the butane working capacity test of the American Society for Testing and Materials (ASTM) Method D 5228-92 (incorporated by reference, see 40 CFR 63.14), or by another suitable procedure as recommended by the manufacturer.
(40 CFR 63.11092(b)(1)(i)(B)(1)(ii))
 - c) Conduct monthly measurements of the carbon bed outlet volatile organic compounds (VOC) concentration over the last 5 minutes of an adsorption cycle for each carbon bed, documenting the highest measured VOC concentration. Measurements shall be made using a portable analyzer, or a permanently mounted analyzer, in accordance with 40 CFR part 60, Appendix A-7, EPA Method 21 for open-ended lines. (40 CFR 63.11092(b)(1)(i)(B)(1)(iii))
- (2) Develop and submit to the Administrator a monitoring and inspection plan that describes the owner or operator's approach for meeting the requirements in paragraphs (b)(1)(i)(B)(2)(i) through (v) of 40 CFR 63.11092. (40 CFR 63.11092(b)(1)(i)(B)(2))
 - a) The lowest maximum required vacuum level and duration needed to assure

regeneration of the carbon beds shall be determined by an engineering analysis or from the manufacturer's recommendation and shall be documented in the monitoring and inspection plan.

(40 CFR 63.11092(b)(1)(i)(B)(2)(i))

- b) The owner or operator shall verify, during each day of operation of the loading rack, the proper valve sequencing, cycle time, gasoline flow, purge air flow, and operating temperatures. Verification shall be through visual observation, or through an automated alarm or shutdown system that monitors system operation. A manual or electronic record of the start and end of a shutdown event may be used.

(40 CFR 63.11092(b)(1)(i)(B)(2)(ii))

- c) The owner or operator shall perform semi-annual preventive maintenance inspections of the carbon adsorption system, including the automated alarm or shutdown system for those units so equipped, according to the recommendations of the manufacturer of the system.

(40 CFR 63.11092(b)(1)(i)(B)(2)(iii))

- d) The monitoring plan developed under paragraph (2) of 40 CFR 63.11092 shall specify conditions that would be considered malfunctions of the carbon adsorption system during the inspections or automated monitoring performed under paragraphs (b)(1)(i)(B)(2)(i) through (iii) of 40 CFR 63.11092, describe specific corrective actions that will be taken to correct any malfunction, and define what the owner or operator would consider to be a timely repair for each potential malfunction.

(40 CFR 63.11092(b)(1)(i)(B)(2)(iv))

- e) The owner or operator shall document the maximum vacuum level observed on each carbon bed from each daily inspection and the maximum VOC concentration observed from each carbon bed on each monthly inspection as well as any system malfunction, as defined in the monitoring and inspection plan, and any activation of the automated alarm or shutdown system with a written entry into a log book or other permanent form of record. Such record shall also include a description of the corrective action taken and whether such corrective actions were taken in a timely manner, as defined in the monitoring and inspection plan, as well as an estimate of the amount of gasoline loaded during the period of the malfunction.
(40 CFR 63.11092(b)(1)(i)(B)(2)(v))

- (b) Where a thermal oxidation system other than a flare is used, the owner or operator shall monitor the operation of the system as specified in paragraphs (b)(1)(iii)(A) or (B) of 40 CFR 63.11092. (40 CFR 63.11092(b)(1)(iii))
 - (i) A CPMS capable of measuring temperature shall be installed in the firebox or in the ductwork immediately downstream from the firebox in a position before any substantial heat exchange occurs. (40 CFR 63.11092(b)(1)(iii)(A))

 - (ii) As an alternative to paragraph (b)(1)(iii)(A) of 40 CFR 63.11092, the owner or operator may choose to meet the following requirements: (40 CFR 63.11092(b)(1)(iii)(B))
 - (1) The presence of a thermal oxidation system pilot flame shall be monitored using a heat-sensing device, such as an ultraviolet beam sensor or a thermocouple, installed in proximity of the pilot light, to indicate the presence of a flame. The heat-sensing device shall send a positive parameter value to indicate that the pilot flame is on, or a

negative parameter value to indicate that the pilot flame is off. (40 CFR 63.11092(b)(2)(iii)(B)(1))

- (2) Develop and submit to the Administrator a monitoring and inspection plan that describes the owner or operator's approach for meeting the requirements in paragraphs (b)(1)(iii)(B)(2)(i) through (v) of this section. (40 CFR 63.11092(b)(1)(iii)(B)(2))
- a) The thermal oxidation system shall be equipped to automatically prevent gasoline loading operations from beginning at any time that the pilot flame is absent. (40 CFR 63.11092(b)(1)(iii)(B)(2)(i))
 - b) The owner or operator shall verify, during each day of operation of the loading rack, the proper operation of the assist-air blower and the vapor line valve. Verification shall be through visual observation, or through an automated alarm or shutdown system that monitors system operation. A manual or electronic record of the start and end of a shutdown event may be used. (40 CFR 63.11092(b)(1)(iii)(B)(2)(ii))
 - c) The owner or operator shall perform semi-annual preventive maintenance inspections of the thermal oxidation system, including the automated alarm or shutdown system for those units so equipped, according to the recommendations of the manufacturer of the system. (40 CFR 63.11092(b)(1)(iii)(B)(2)(iii))
 - d) The monitoring plan developed under 40 CFR 63.11092(2) shall specify conditions that would be considered malfunctions of the thermal oxidation system during the inspections or

automated monitoring performed under paragraphs (b)(1)(iii)(B)(2)(ii) and (iii) of this section, describe specific corrective actions that will be taken to correct any malfunction, and define what the owner or operator would consider to be a timely repair for each potential malfunction. (40 CFR 63.11092(b)(1)(iii)(B)(2)(iv))

- e) The owner or operator shall document any system malfunction, as defined in the monitoring and inspection plan, and any activation of the automated alarm or shutdown system with a written entry into a log book or other permanent form of record. Such record shall also include a description of the corrective action taken and whether such corrective actions were taken in a timely manner, as defined in the monitoring and inspection plan, as well as an estimate of the amount of gasoline loaded during the period of the malfunction. (40 CFR 63.11092(b)(1)(iii)(B)(2)(v))
- (c) Monitoring an alternative operating parameter or a parameter of a vapor processing system other than those listed in 40 CFR 63.11088(b)(1)(i) through (iii) will be allowed upon demonstrating to the Administrator's satisfaction that the alternative parameter demonstrates continuous compliance with the emission standard in 40 CFR 63.11088(a). (40 CFR 63.11092(b)(1)(iv))
- 2) Determine an operating parameter value based on the parameter data monitored during the performance test, supplemented by engineering assessments and the manufacturer's recommendations. (40 CFR 63.11092(b)(3))
 - 3) Provide for the Administrator's approval the rationale for the selected operating parameter value, monitoring frequency, and averaging time, including data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the emission standard in 40 CFR 63.11088(a). (40 CFR 63.11092(b)(4))
 - 4) If the owner or operator has chosen to comply with the performance testing alternatives provided under 40 CFR

63.11092(a)(2) or 40 CFR 63.11092(a)(3), the monitored operating parameter value may be determined according to the following: (40 CFR 63.11092(b)(5))

- (a) Monitor an operating parameter that has been approved by the Administrator and is specified in your facility's current enforceable operating permit. At the time that the Administrator requires a new performance test, you must determine the monitored operating parameter value according to the requirements specified in paragraph (b) of this section. (40 CFR 63.11092(b)(5)(i))
 - (b) Determine an operating parameter value based on engineering assessment and the manufacturer's recommendation and submit the information specified in paragraph (b)(4) of this section for approval by the Administrator. At the time that the Administrator requires a new performance test, you must determine the monitored operating parameter value according to the requirements specified in paragraph (b) of this section. (40 CFR 63.11092(b)(5)(ii))
- x. For performance tests performed after the initial test required under 40 CFR 63.11092(a), the owner or operator shall document the reasons for any change in the operating parameter value since the previous performance test. (40 CFR 63.11092(c))
- xi. Each owner or operator of a bulk gasoline terminal subject to the provisions of this subpart shall comply with the following requirements: (40 CFR 63.11092(d))
- 1) Operate the vapor processing system in a manner not to exceed or not to go below, as appropriate, the operating parameter value for the parameters described in 40 CFR 63.11092(b)(1). (40 CFR 63.11092(d)(1))
 - 2) In cases where an alternative parameter pursuant to 40 CFR 63.11092(b)(1)(iv) or 40 CFR 63.11092(b)(5)(i) is approved, each owner or operator shall operate the vapor processing system in a manner not to exceed or not to go below, as appropriate, the alternative operating parameter value. (40 CFR 63.11092(d)(2))
 - 3) Operation of the vapor processing system in a manner exceeding or going below the operating parameter value, as appropriate, shall constitute a violation of the emission standard in 40 CFR 63.11088(a) (Subpart BBBBBB), except as specified in paragraph (d)(4) of this section. (40 CFR 63.11092(d)(3))
 - 4) For the monitoring and inspection, as required under paragraphs (b)(1)(i)(B)(2) and (b)(1)(iii)(B)(2) of this section, malfunctions that are discovered shall not constitute a violation of the emission

standard in 40 CFR 63.11088(a) (Subpart BBBBBB) if corrective actions as described in the monitoring and inspection plan are followed. The owner or operator must: (40 CFR 63.11092(d)(4))

- (a) Initiate corrective action to determine the cause of the problem within 1 hour; (40 CFR 63.11092(d)(4)(i))
 - (b) Initiate corrective action to fix the problem within 24 hours; (40 CFR 63.11092(d)(4)(ii))
 - (c) Complete all corrective actions needed to fix the problem as soon as practicable consistent with good air pollution control practices for minimizing emissions; (40 CFR 63.11092(d)(4)(iii))
 - (d) Minimize periods of start-up, shutdown, or malfunction; and (40 CFR 63.11092(d)(4)(iv))
 - (e) Take any necessary corrective actions to restore normal operation and prevent the recurrence of the cause of the problem. (40 CFR 63.11092(d)(4)(v))
- xii. Each owner or operator subject to the emission standard in 40 CFR 63.11087 of Subpart BBBBBB for gasoline storage tanks shall, if your gasoline storage tank is equipped with an external floating roof, perform inspections of the floating roof system according to the Standards of Performance for Storage Vessels requirements of 40 CFR 60.113b(b) (Subpart Kb) if you are complying with option 2(c) in Table 1 to this subpart: (40 CFR 63.11092(e)) you must. (40 CFR 63.11092(e)(2))
- 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. (40 CFR 60.113b(b)(1))
 - (a) 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. (40 CFR 60.113b(b)(1)(i))
 - (b) 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. (40 CFR 60.113b(b)(1)(ii))
 - (c) 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 §§60.113b(b)(1)(i) and (b)(1)(ii). (40 CFR 60.113b(b)(1)(iii))

- 2) Determine gap widths and areas in the primary and secondary seals individually by the following procedures: (40 CFR 60.113b(b)(2))
 - (a) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports. (40 CFR 60.113b(b)(2)(i))
 - (b) 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. (40 CFR 60.113b(b)(2)(ii))
 - (c) The total surface area of each gap described in §60.113b(b)(2)(ii) 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. (40 CFR 60.113b(b)(2)(iii))
- 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 §60.113b(b)(4). (40 CFR 60.113b(b)(3))
- 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 §60.113b(b)(4) (i) and (ii): (40 CFR 60.113b(b)(4))
 - (a) 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. (40 CFR 60.113b(b)(4)(i))
 - (i) 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. (40 CFR 60.113b(b)(4)(i)(A))
 - (ii) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope. (40 CFR 60.113b(b)(4)(i)(B))
 - (b) The secondary seal is to meet the following requirements: (40 CFR 60.113b(b)(4)(ii))

- (i) 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 §60.113b(b)(2)(iii). (40 CFR 60.113b(b)(4)(ii)(A))
 - (ii) 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. (40 CFR 60.113b(b)(4)(ii)(B))
 - (iii) There are to be no holes, tears, or other openings in the seal or seal fabric. (40 CFR 60.113b(b)(4)(ii)(C))
- (c) If a failure that is detected during inspections required in §60.113b(b)(1) 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. (40 CFR 60.113b(b)(4)(iii))
- 5) Notify the Administrator 30 days in advance of any gap measurements required by §60.113b(b)(1) to afford the Administrator the opportunity to have an observer present. (40 CFR 60.113b(b)(5))
- 6) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. (40 CFR 60.113b(b)(6))
 - (a) 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. (40 CFR 60.113b(b)(6)(i))
 - (b) For all the inspections required by §60.113b(b)(6), 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 §60.113b(b)(6) 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. (40 CFR 60.113b(b)(6)(ii))

- xiii. *EPA Method 27, Appendix A–8, 40 CFR part 60.* The annual certification test for gasoline cargo tanks shall consist of the test method specified in paragraphs (f)(1) of this section. Conduct the test using a time period (t) for the pressure and vacuum tests of 5 minutes. The initial pressure (P_i) for the pressure test shall be 460 millimeters (mm) of water (18 inches of water), gauge. The initial vacuum (V_i) for the vacuum test shall be 150 mm of water (6 inches of water), gauge. The maximum allowable pressure and vacuum changes (Δp , Δv) for all affected gasoline cargo tanks is 3 inches of water, or less, in 5 minutes. (40 CFR 63.11092(f)(1))
- xiv. *Conduct of performance tests.* Performance tests conducted for this subpart shall be conducted under such conditions as the Administrator specifies to the owner or operator, based on representative performance (*i.e.*, performance based on normal operating conditions) of the affected source. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. (40 CFR 63.11092(g))

c. **TAC**

There are no routine testing requirements in regard to this pollutant for this emission unit.

Plant-Wide Comments

1. The District received a revised plant-wide environmental acceptability (EA) demonstration on August 18, 2015 and October 27, 2015.

The company demonstrated that emissions from Benzene were environmentally acceptable through modeling using controlled potential emissions and limiting gasoline throughput to 152,000,000 gal/yr as reflected in U3.

The company demonstrated that emissions from Chloroform were environmentally acceptable through modeling using controlled potential emissions as reflected in U1.

Emission Unit	TAC	Maximum Ambient Concentration (µg/m³)	BAC_c (µg/m³)	Individual Process Risk, R_c	Individual Process EAG_c
U3, Truck Loading	Benzene	0.44223	0.45	0.98	1.0
U1, EP E8	Chloroform	0.01285	0.043	0.30	1.0
U1, EP E9	Chloroform	0.01182	0.043	0.27	1.0
U1, EP E10	Chloroform	0.01490	0.043	0.35	1.0
Plant-wide	-	-	-	Plant-wide R_c 1.90	Total EAG_c 7.5

Emission Unit	TAC	Maximum Ambient Concentration (µg/m³)	BAC_{NC} (µg/m³)	Individual Process Risk, R_{NC}	Individual Process EAG_{NC}
U3, Truck Loading	Benzene	0.44223	30	0.0147	1.0
U1, EP E8	Chloroform	0.01285	300	0.00004	1.0
U1, EP E9	Chloroform	0.01182	300	0.00004	1.0
U1, EP E10	Chloroform	0.01490	300	0.00005	1.0
Plant-wide	-	-	-	Plant-wide R_{NC} 0.015	Total EAG_{NC} 1

Emission Unit U1: Chloroform Storage Tanks**U1 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	All
5.15	Chemical Accident Prevention Provisions	1 and 2
6.13	Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds	1 through 6
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	1 through 8
40 CFR Part 60 Subpart Kb	Federal New Source Performance Standards for VOC Liquid Storage Vessels	60.112(a) and 60.116(b)

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.14	Hazardous Air Pollutants and Source Categories	1, 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
7.02	Adoption and Incorporation by Reference of Federal New Source Performance Standards	1, 2, 3.24 and 4

U1 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
E8	A 10,000 Barrel (424,074 gallons) Bottom Fill Internal Floating Roof Chloroform Storage Tank #9	STAR*, 5.14 and 6.13 ⁸	C1	S1	1958

⁸ 40 CFR 60 Subpart Kb does not apply to this equipment since these tanks were installed prior to July 23, 1984 per 40 CFR 60.110b(a).

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
E9	A 10,000 Barrel (428,274 gallons) Chloroform Storage Tank #10 with Internal Floating Roof and Fixed Roof Cover of Welded Steel Construction by Chicago Bridge & Iron	STAR*, 5.14 and 7.12 ⁸	C2	S2	1981
E10	A 10,000 Barrel (428,736 gallons) Internal Floating Roof Chloroform Storage Tank #11	STAR*, 5.14, 7.12, and 40 CFR 60 Subpart Kb	C3	S3	1985
* STAR rules consist of Regulations 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23.					

U1 Control Devices:

Control ID	Description	Make/Model	Pollutant Controlled
C1	Carbon Adsorber	Vapor Technologies, Nova 2000, PS-CS48 Granular Activated Carbon Coconut Shell	Chloroform
C2	Carbon Adsorber	Vapor Technologies, Nova 2000, PS-CS48 Granular Activated Carbon Coconut Shell	
C3	Carbon Adsorber	Vapor Technologies, Nova 2000, PS-CS48 Granular Activated Carbon Coconut Shell	

U1 Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. VOC

- i. See Plant-Wide Specific Conditions [S1.a](#).
- ii. The owner or operator shall equip Emission Points E8, E9 and E10 (storage tanks 9, 10 and 11) with a floating roof.⁹ (Regulation 6.13 and Regulation 7.12, section 3.1)
- iii. The owner or operator shall equip Emission Points E8, E9 and E10 (storage tanks 9, 10 and 11) with a permanent submerged fill pipe.¹⁰ (Regulation 6.13 and Regulation 7.12, section 3.3)
- iv. For Emission Point E10 (storage tank 11), subject to Regulation 40 CFR Part 60 Subpart Kb:

The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ containing a volatile organic liquid (VOL) that, as stored, has a maximum true vapor pressure greater than or equal to 5.2 kPa but less than 76.6 kPa shall equip each storage vessel with one of the following: (40 CFR 60.112b(a))

A fixed roof in combination with an internal floating roof meeting the following specifications: (40 CFR 60.112b(a)(1))

- 1) 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. (40 CFR 60.112b(a)(1)(i))
- 2) Each internal floating roof shall be equipped with the following closure devices between the wall of the storage vessel and the edge of the internal floating roof: (40 CFR 60.112b(a)(1)(ii))

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

⁹ The three chloroform storage tanks are equipped with internal floating roofs and each tank has a carbon adsorber.

¹⁰ The three chloroform storage tanks are equipped with a permanent submerged fill pipe.

the metal sheet and the floating roof. (40 CFR 60.112b(a)(1)(ii)(C))

- 3) 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. (40 CFR 60.112b(a)(1)(iii))
- 4) 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. (40 CFR 60.112b(a)(1)(iv))
- 5) 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. (40 CFR 60.112b(a)(1)(v))
- 6) 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 60.112b(a)(1)(vi))
- 7) 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 60.112b(a)(1)(vii))
- 8) 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 60.112b(a)(1)(viii))
- 9) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. (40 CFR 60.112b(a)(1)(ix))

b. **HAP**

See Plant-Wide Specific Conditions [S1.b.i](#) and [ii](#).

c. **TAC**

i. See Plant-Wide Specific Conditions [S1.c](#).

ii. The owner or operator shall utilize the control devices (Carbon Adsorbers C1, C2 and C3) at all times the processes are in operation and shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with

good air pollution control practice for minimizing emissions¹¹.(See Comment 1)

d. **District Regulation 5.15 Regulated Substance (40 CFR Part 68 Subpart G)**

The owner or operator shall comply with the Risk Management Plan for the handling of Chloroform, submitted to EPA on April 16, 2014.

S2. **Monitoring and Record Keeping** (Regulation 2.17, section 5.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

i. See Plant-Wide Specific Conditions [S2.a](#).

For storage tanks subject to Regulation 6.13 and 7.12:

ii. The owner or operator shall for Emission Points E8, E9 and E10 (storage tanks 9, 10 and 11) ensure that there shall be no visible holes, tears, or other openings in the seal or any seal fabric. (Regulation 6.13 and Regulation 7.12, section 4.1)

iii. The owner or operator shall for storage vessels (E8, E9 and E10) (storage tanks 9, 10 and 11) ensure that all openings, except stub drains, shall be equipped with covers, lids, or seals such that: (Regulation 6.13 and Regulation 7.12, section 4.2)

a) The cover, lid, or seal is in the closed position at all times except when in actual use; and

b) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and

c) Rim vents are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.¹²

iv. For Emission Point E10 (storage tank 11) subject to 40 CFR Part 60 Subpart Kb: The owner or operator of each storage vessel shall: (40 CFR 60.113b(a))

1) Prior to filling the storage vessel with VOL, visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service). 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. (40 CFR 60.113b(a)(1))

¹¹ The source submitted an updated plant-wide STAR Environmental Acceptability Demonstration (EA Demo) received on August 18, 2015. The EA Demo showed that chloroform controlled will not exceed the EA goals. The environmental acceptability for this process has been demonstrated as long as the carbon adsorbers are in operation.

¹² The three chloroform storage tanks are equipped with pressure vacuum relief valves.

- 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 District in the inspection report required in the Reporting and Recordkeeping Requirements of 40 CFR 60.115b(a)(3) (Subpart Kb). 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. (40 CFR 60.113b(a)(2))
- 3) For vessels equipped with a double seal system as specified in the Standard for VOC of 40 CFR 60.112b(a)(1)(ii)(B) (Subpart Kb) (40 CFR 60.113b(a)(3))
 - a) Visually inspect the vessel according to the Testing and Procedures section of 40 CFR 60.113b(a)(4) in Subpart Kb at least every 5 years; or (40 CFR 60.113b(a)(3)(i))
 - b) Visually inspect the vessel as specified in according to the Testing and Procedures section of 40 CFR 60.113b(a)(2) in Subpart Kb. (40 CFR 60.113b(a)(3)(ii))
- 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 the Testing and Procedures section of 40 CFR 60.113b(a)(2) and 60.113b(a)(3)(ii) (Subpart Kb) and at intervals no greater than 5

- years in the case of vessels specified in 40 CFR 60.113b(a)(4) of the same section. (40 CFR 60.113b(a)(4))
- 5) Notify the District in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by the Testing and Procedures section of 40 CFR 60.113b(a)(1) and 60.113b(a)(4) (Subpart Kb) in order to afford the District the opportunity to have an observer present. If the inspection required by 40 CFR 60.113b(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 District 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 District at least 7 days prior to the refilling. (40 CFR 60.113b(a)(5))
- v. The owner or operator shall keep a record of each inspection performed as required by the Testing and Procedures section of 40 CFR 60.113b(a)(1), (a)(2), (a)(3), and (a)(4) (Subpart Kb). 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). (40 CFR 60.115b(a)(2))
- vi. The owner or operator shall keep copies of all records required by 40 CFR 60.116b, except for the record required by 40 CFR 60.116b(b), for at least 2 years. The record required by 40 CFR 60.116b(b) will be kept for the life of the source. (40 CFR 60.116b(a))
- vii. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. (40 CFR 60.116b(b))
- viii. Except as provided in 40 CFR 60.116b(f) and (g), 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 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. (40 CFR 60.116b(c))
- ix. For other liquids, the vapor pressure: (40 CFR 60.116b(e)(3))
- 1) May be obtained from standard reference texts, or (40 CFR 60.116b(e)(3)(i))
 - 2) Determined by ASTM D2879-83, 96, or 97 (incorporated by reference—see § [60.17](#)); or (40 CFR 60.116b(e)(3)(ii))

- 3) Measured by an appropriate method approved by the Administrator; or (40 CFR 60.116b(e)(3)(iii))
- 4) Calculated by an appropriate method approved by the Administrator. (40 CFR 60.116b(e)(3)(iv))

b. **HAP**

See Plant-Wide Specific Conditions [S2.b.i.](#)

c. **TAC**

- i. See Plant-Wide Specific Conditions [S2.c.](#)
- ii. If there is any time that the carbon adsorbers (C1, C2 and C3) are not in operation when the processes are operating, then the owner or operator shall keep a record of the following for each event:
 - a) Date;
 - b) Start time and stop time;
 - c) Identification of the control device and process equipment;
 - d) Each TAC emission during the event in lb/hr and lb/12 consecutive month;
 - e) Summary of the cause or reason for each event;
 - f) Corrective action taken to minimize the extent or duration of the event; and
 - g) Measures implemented to prevent reoccurrence of the situation that resulted in the event.
- iii. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of the carbon adsorbers (C1, C2 and C3) for signs of damage, air leakage, corrosion, or other equipment defects, and repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- iv. The owner or operator shall conduct sampling during each transfer for each carbon adsorber canister to make sure the concentration is below 13.58 ppm¹³. Concentrations over 13.58 ppm require a carbon change out.
- v. If there is any time that the carbon adsorbers (C1, C2 and C3) concentration exceeds 13.58 ppm, then the owner or operator shall keep a record of the following for each event:
 - a) Date and time;
 - b) Identification of the control device and process equipment;
 - c) Measured concentration

¹³ As long as each of the carbon adsorbers stay below the 13.58 ppm limit, the emissions from Chloroform will be environmentally acceptable.

- d) Summary of the cause or reason for each event;
- e) Corrective action taken to minimize the extent or duration of the event; and
- f) Measures implemented to prevent reoccurrence of the situation that resulted in the event.

S3. **Reporting** (Regulation 2.17, section 5.2)

a. **VOC**

- i. See Plant-Wide Specific Conditions [S3.a](#).

For Emission Point E10 (storage tank 11) subject to 40 CFR Part 60 Subpart Kb:

- ii. The owner or operator shall: (40 CFR 60.115b(a))
- 1) Furnish the District with a report that describes the control equipment and certifies that the control equipment meets the Standard for VOC specifications of 40 CFR 60.112b(a)(1) and the Testing and Procedures of 40 CFR 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3) in the General Provisions. (40 CFR 60.115b(a)(1))
 - 2) If any of the conditions described in the Testing and Procedures of 40 CFR 60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2), a report shall be furnished to the District 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. (40 CFR 60.115b(a)(3))
 - 3) After each inspection required by the Testing and Procedures of 40 CFR 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 the Testing and Procedures of 40 CFR 60.113b(a)(3)(ii), a report shall be furnished to the District within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the Standard for VOC specifications of 40 CFR 61.112b(a)(1) or the Testing and Procedures of 40 CFR 60.113b(a)(3) and list each repair made. (40 CFR 60.115b(a)(4))
- iii. Except as provided in 40 CFR 60.116b(g), 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, shall notify the District within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. (40 CFR 60.116b(d))

b. **HAP**

- See Plant-Wide Specific Conditions [S3.b.i](#).

c. TAC

- i. See Plant-Wide Specific Conditions [S3.c](#).
- ii. The owner or operator shall clearly identify all deviations from permit requirements in the annual report and include the following information:
 - a) Emission unit ID number and emission point ID number;
 - b) Identification of all times the carbon adsorbers (C1, C2 and C3) are not in operation;
 - c) Calculated lb/hr and lb/12 consecutive month for each TAC emission when an adsorbers is not in operation;
 - d) Measured concentrations for the adsorbers greater than 13.58 ppm;
 - e) Summary of the cause or reason for each event; and
 - f) Description of corrective action taken to prevent future exceedances; or
 - g) A negative declaration if no deviations occur during the reporting period.

U1 Comments

- 1. The District received a revised plant-wide environmental acceptability (EA) demonstration on August 18, 2015 and October 27, 2015. The company demonstrated that emissions from Chloroform were environmentally acceptable through modeling using controlled potential emissions.

Emission Unit	TAC	Maximum Ambient Concentration (µg/m ³)	BACc Chloroform (µg/m ³)	Individual Process Risk, R _c	Individual Process EAG _C
U1, EP E8	Chloroform	0.01285	0.043	0.30	1.0
U1, EP E9	Chloroform	0.01182	0.043	0.27	1.0
U1, EP E10	Chloroform	0.01490	0.043	0.35	1.0

Emission Unit	TAC	Maximum Ambient Concentration (µg/m ³)	BAC _{NC} Chloroform (µg/m ³)	Individual Process Risk, R _{NC}	Individual Process EAG _{NC}
U1, EP E8	Chloroform	0.01285	300	0.00004	1.0
U1, EP E9	Chloroform	0.01182	300	0.00004	1.0
U1, EP E10	Chloroform	0.01490	300	0.00005	1.0

Emission Unit U2: Gasoline and Distillate Storage Tanks

U2 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	All
6.13	Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds	1 through 6
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	1 through 8
40 CFR Part 63 Subpart BBBB	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities	11080-11085, 11087-11089, 11092-11095, 11098-11100

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.02	Adoption of National Emission Standards for Hazardous Air Pollutants	1, 2, 3.95 and 4
5.14	Hazardous Air Pollutants and Source Categories	1, 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U2 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
E1	Gasoline Storage Tank #1, 1,464,246 Gallons External Floating Roof	STAR* 6.13 and 40 CFR 63 Subpart BBBB	N/A	N/A	1955
E2	Gasoline Storage Tank #2 1,463,784 Gallons External Floating Roof	STAR* 6.13 and 40 CFR 63 Subpart BBBB	N/A	N/A	1955

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
E3	Gasoline Storage Tank #3 14,619,363 Gallons External Floating Roof	STAR* 6.13 and 40 CFR 63 Subpart BBBBBB	N/A	N/A	1955
E4	Gasoline Storage Tank #5 1,464,162 Gallons External Floating Roof	STAR* 6.13 and 40 CFR 63 Subpart BBBBBB	N/A	N/A	1955
E5	Gasoline Storage Tank #6 1,885,086 Gallons External Floating Roof	STAR* 6.13 and 40 CFR 63 Subpart BBBBBB	N/A	N/A	1955
E6	Distillate Storage Tank #7 1,416,786 Gallons Vertical Fixed Roof	STAR* and 6.13	N/A	N/A	1955
E7	Distillate Storage Tank #8 1,416,786 Gallons Internal Floating Roof	STAR* and 6.13	N/A	N/A	1955
E11	Diesel Fuel Additive Infineum R680 Tank #14, 8000 Gallons Vertical Fixed Roof	STAR* and 7.12	N/A	N/A	1995
E12	Gasoline Additive Storage Tank #15 10,000 Gallons Vertical Fixed Roof	STAR* and 7.12	N/A	N/A	2002
E13	Gasoline Additive Storage Tank #16 557 Gallons Vertical Fixed Roof	STAR* and 7.12	N/A	N/A	2003
E14	Storage Tank #17, 1050 Gallons Horizontal Above Ground	STAR* and 7.12	N/A	N/A	2004
E15	Storage Tank #18, 8000 Gallons Horizontal Above Ground	STAR* and 7.12	N/A	N/A	2006
* STAR rules consist of Regulations 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23.					

U2 Control Devices:

There are no control devices for Emission Unit U2.

U2 Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. VOC

- i. See Plant-Wide Specific Conditions [S1.a](#).
- ii. For Emission Points E11, E12, E13, E14 and E15 (storage tanks 14, 15, 16, 17 and 18), the owner or operator shall not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia in the storage vessel(s), unless the storage tank is equipped with a permanent submerged fill pipe.^{14,15} (Regulation 7.12, section 3.3)
- iii. The owner or operator shall equip the Emission Points E1, E2, E3, E4, E5, E6 and E7 (storage tanks 1, 2, 3, 5, 6, 7 and 8) with a floating roof. (Regulation 6.13, section 3.1)
- iv. The owner or operator shall equip Emission Points E1, E2, E3, E4, E5, E6 and E7 (storage tanks 1, 2, 3, 5, 6, 7 and 8) with a permanent submerged fill pipe. (Regulation 6.13, section 3.3)
- v. The owner or operator shall for Emission Points E1, E2, E3, E4 and E5 (storage tanks 1, 2, 3, 5 and 6) with an external floating roof meet the following additional requirements: (Regulation 6.13, section 4.3)
 - a) The seals must be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall;
 - b) The gap area of gaps exceeding 0.32 cm (1/8 in) in width between the secondary seal installed pursuant to section 3.4.1 and the tank wall shall not exceed 6.5 sq cm /0.3 m of tank diameter (1.0 sq in /ft);
 - c) All openings in the external floating roof, except for automatic bleeder vents, rim space, and leg sleeves, are to provide a projection below the liquid surface; and
 - d) Any emergency roof drain is to be provided with a slotted membrane fabric cover or equivalent that covers at least 90% of the area of the opening.

b. HAP

- i. For Emission Points E1, E2, E3, E4 and E5 (storage tanks 1, 2, 3, 5 and 6), see Plant-Wide Specific Conditions [S1.b](#).
- ii. For Emission Points E6, E7, E11, E12, E13, E14 and E15 (storage tanks 7, 8, 14, 15, 16, 17 and 18), see Plant-Wide Specific Conditions [S1.b.i](#) and [ii](#).

¹⁴ Regulation 7.12 applies due to the size of the tanks, but as long as the vapor pressure as stored is less than 1.5 psia there are no applicable standards.

¹⁵ These tanks are not subject to 40 CFR Part 60 Subpart Kb due to the size of the tanks.

c. **TAC**¹⁶

See Plant-Wide Specific Conditions [S1.c.](#)

S2. **Monitoring and Record Keeping** (Regulation 2.17, section 5.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

i. See Plant-Wide Specific Conditions [S2.a.](#)

ii. The true vapor pressure shall be determined by using the average monthly storage temperature and typical Reid vapor pressure of the contained liquid or from typical available data on the contained liquid. Supporting analytical data shall be requested by the District if there is a question on the values reported. (Regulation 6.13, section 5.2)

iii. The owner or operator shall for Emission Points E1, E2, E3, E4 and E5 (storage tanks 1, 2, 3, 5 and 6) with an external floating roof perform the following additional requirements: (Regulation 6.13, sections 5.3 and 5.4)

1) Perform routine inspections semiannually in order to ensure compliance with [Specific Condition S1.a.vi.](#), and the inspections shall include a visual inspection of the secondary seal gap; and

2) Measure the secondary seal gap annually by physically measuring the length and width of all gaps around the entire circumference of the secondary seal in each place where a 0.32 cm (1/8 in) uniform diameter probe passes freely (without forcing or binding against the seal) between the seal and tank wall and summing the area of the individual gaps when the floating roof is equipped with a vapor mounted primary seal.

iv. The owner or operator shall for Emission Points E1, E2, E3, E4, E5, E6 and E7 (storage tanks 1, 2, 3, 5, 6, 7 and 8) ensure that there shall be no visible holes, tears, or other openings in the seal or any seal fabric. ((Regulation 6.13, section 4.1)

v. The owner or operator shall for Emission Points E1, E2, E3, E4, E5, E6 and E7 (storage tanks 1, 2, 3, 5, 6, 7 and 8) ensure that all openings, except stub drains, shall be equipped with covers, lids, or seals such that: (Regulation 6.13, section 4.2)

a) The cover, lid, or seal is in the closed position at all times except when in actual use; and

b) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and

¹⁶ The potential uncontrolled emissions from each of the storage tanks are de minimis pursuant to Regulation 5.21, sections 2.4 and 2.5.

- c) Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.
 - b. **HAP**
 - i. For Emission Points E1, E2, E3, E4 and E5 (storage tanks 1, 2, 3, 5 and 6), see Plant-Wide Specific Conditions [S2.b.](#)
 - ii. For Emission Points E6, E7, E11, E12, E13, E14 and E15 (storage tanks 7, 8, 14, 15, 16, 17 and 18), see Plant-Wide Specific Conditions [S2.b.i.](#)
 - c. **TAC**

See Plant-Wide Specific Conditions [S2.c.](#)
- S3. **Reporting** (Regulation 2.17, section 5.2)
 - a. **VOC**

See Plant-Wide Specific Conditions [S3.a.](#)
 - b. **HAP**
 - i. For Emission Points E1, E2, E3, E4 and E5 (storage tanks 1, 2, 3, 5 and 6), see Plant-Wide Specific Conditions [S3.b.](#)
 - ii. For Emission Points E6, E7, E11, E12, E13, E14 and E15 (storage tanks 7, 8, 14, 15, 16, 17 and 18), see Plant-Wide Specific Conditions [S3.b.i.](#)
 - c. **TAC**

See Plant-Wide Specific Conditions [S3.c.](#)

Emission Unit U3: Truck Loading Rack with Control Unit**U3 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.04	Performance Tests	1 through 3
1.05	Compliance with Emission Standards and Maintenance Requirements	1 through 5
2.17	Federally Enforceable District Origin Operating Permits	1 through 9
6.21	Standard of Performance for Existing Gasoline Loading Facilities at Bulk Terminals	1 through 5
40 CFR Part 60 Subpart A	General Provisions	1 through 18
40 CFR Part 60 Subpart XX	Standards of Performance for Bulk Gasoline Terminals	500 through 503, 505
40 CFR 63 Subpart BBBBBB	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities	11080-11085, 11087-11089, 11092-11095, 11098-11100

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.02	Adoption of National Emission Standards for Hazardous Air Pollutants	1, 2, 3.95 and 4
5.14	Hazardous Air Pollutants and Source Categories	1, 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
7.02	Adoption and Incorporation by Reference of Federal New Source Performance Standards	1, 2, 3.24 and 4

U3 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
E16	Truck loading rack consisting of two bays, 225,000 gal/hr (4 arms for gasoline and 3 arms for distillate). All loading is by bottom fill	STAR*, 5.14, 6.21, 40 CFR Part 60 Subpart XX and 40 CFR 63 Subpart BBBBBB	C4	S4	1995
* STAR rules consist of Regulations 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23.					

U3 Control Devices:

Control ID	Description	Make/Model	Pollutant Controlled
C4	Carbon adsorption vapor combustion unit (VCU) for collecting and controlling gasoline vapors from the bulk terminal loading rack operations	John Zink Model ZCT-3-8-45-3-2/8-2/8	VOC

U3 Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. VOC

- i. See Plant-Wide Specific Conditions [S1.a.](#)
- ii. The owner or operator shall limit source-wide throughput to the following, based on AP-42 emission factors, as calculated on a 12-month rolling total basis.¹⁷ (Regulation 2.17, section 5.1 and Regulation 1.05 Compliance Plan, revised June 2015)

<u>Product</u>	<u>Gallons/Year</u>
Chloroform	25,000,000
Gasoline/Ethanol	152,000,000
Distillate Fuel Oil	280,320,000
Crude Oil	3,360,000

- iii. 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. (40 CFR 60.502 (a), and Regulation 6.21, sections 3.1 & 3.2)
- iv. The emission 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 compound per liter of gasoline loaded, except during periods of vapor combustion unit (VCU) maintenance or malfunction.¹⁸ (40 CFR 60.502(b))
- v. 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. (40 CFR 60.502(c))
- vi. 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. (40 CFR 60.502(d))
- vii. Loading of liquid product into gasoline tanks trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures: (40 CFR 60.502(e))

¹⁷ Since all petroleum products delivered to the terminal are subsequently loaded onto trucks, limiting the loading rack throughput essentially creates a “bottleneck” that limits the storage tank throughput as well. Therefore the entire terminal’s potential to emit is limited to 95 tons of VOCs per year. Emissions are based on AP-42 emission factors and EPA TANKS version 4.0 software.

¹⁸ The company has demonstrated that its potential to emit does not exceed the MACT thresholds, there at this time it does not have to comply with the requirements of 40 CFR 63 Subpart R – *National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)*.

- 1) The owner or operator shall obtain the vapor tightness documentation described in the Reporting and Recordkeeping of 40 CFR 60.505(b) (Subpart XX) for each gasoline tank truck, which is to be loaded at the affected facility. (40 CFR 60.502(e)(1))
- 2) The owner or operator shall verify the tank truck or trailer has a valid Kentucky pressure-vacuum test sticker as required by Regulation 6.37 attached and visibly displayed. (Regulation 6.21, section 3.6.4)
- 3) The owner or operator shall require the tank identification number to be recorded as each gasoline tank truck is loaded at the affected facility. (40 CFR 60.502(e)(2))
- 4) The owner or operator shall, cross-check each tank identification number obtained in 40 CFR 60.502(e)(2) of Subpart XX 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: (40 CFR 60.502(e)(3)(i))
 - (i) 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 (40 CFR 60.502(e)(3)(i)(A))
 - (ii) 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 semi-annually. (40 CFR 60.502(e)(3)(i)(B))
 - (iii) If either the quarterly or semiannual cross-check provided in 40 CFR 60.502(e)(3)(i)(A) and (B) of Subpart XX reveals that these conditions were not maintained, the source must return to bi-weekly monitoring until such time as these conditions are again met. (40 CFR 60.502(e)(3)(ii))
- 5) The 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 40 CFR 60.502(e)(3) of Subpart XX. (40 CFR 60.502(e)(4))
- 6) The owner or operator shall take steps assuring that the non-vapor-tight gasoline truck will not be reloaded at the affected facility until vapor tightness documentation for that tank is obtained. (40 CFR 60.502(e)(5))
- 7) Alternative procedures to those described in 40 CFR 60.502(e)(1) through (5) of Subpart XX for limiting gasoline tank truck loadings may be used upon application to, and approved by, the District. (40 CFR 60.502(e)(6))

- viii. The owner or operator shall act to assure that loadings of gasoline tank trucks at the affected facility are made only into tank trucks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system. (40 CFR 60.502(f))
 - ix. 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 gasoline tank truck at the affected facility. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible emission reminder signs at the affected loading racks. (40 CFR 60.502(g))
 - x. 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 Test Methods and Procedures specified in 40 CFR 60.503(d) (Subpart XX). (40 CFR 60.502(h) and Regulation 6.21, section 3.6.1)
 - xi. 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 Pascal (450 mm of water). (40 CFR 60.502(i))
 - xii. 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. (40 CFR 60.502(j))
 - xiii. The owner or operator shall not open tank hatches or allow hatches to be opened at any time during loading operation if bottom-fill is practiced. If top-submerged fill is practiced, the hatch is to be opened the minimum time necessary to install and remove the submerged fill pipe and associated vapor collection equipment. (Regulation 6.21, section 3.4)
 - xiv. The owner or operator shall not permit gasoline to be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation. (Regulation 6.21, section 3.5)
- b. **HAP**
See Plant-Wide Specific Conditions [S1.b](#).
- c. **TAC**
- i. See Plant-Wide Specific Conditions [S1.c](#). (See Comment 1)
 - ii. The owner or operator shall limit gasoline throughput to 152,000,000 gal/yr to be environmentally acceptable. (See Comment 1)

- iii. The owner or operator shall operate the carbon adsorption vapor combustion unit (VCU) at all times any of the loading rack arms are in operation. (Regulation 2.17, section 5.1) (See Comment 1)

S2. Monitoring and Record Keeping (Regulation 2.17, section 5.2)

Records shall be readily retrievable and shall be maintained for five (5) years prior to disposal. The owner or operator shall monitor and maintain records of the following information.

a. VOC

- i. See Plant-Wide Specific Conditions [S2.a](#).
- ii. The owner or operator shall monthly maintain monthly records that show the quantity, in gallons, of each product type loaded through the terminal loading rack. (Regulation 2.17, section 5.2 and Regulation 1.05 Compliance Plan, revised June 2015)
- iii. The tank truck vapor tightness documentation required under the Standard for VOC in 40 CFR 60.502(e)(1) (Subpart XX) shall be kept on file at the terminal in a permanent form available for inspection. (40 CFR 60.505(a))
- iv. 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: (40 CFR 60.505(b))
 - 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).
- v. A record of each monthly leak inspection required under 40 CFR 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: (40 CFR 60.505(c))
 - 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, if any (date each leak repaired; reasons for any repair interval in excess of 15 days).
 - 5) Inspector name and signature.
- vi. The owner or operator shall keep documentation of all notifications required under 40 CFR 60.502(e)(4) on file at the terminal for at least 2 years. (40 CFR 60.505(d))
 - vii. 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 on file for at least 3 years. (40 CFR 60.505(f))
- b. **HAP**
See Plant-Wide Specific Conditions [S2.b.](#)
 - c. **TAC**
 - i. See Plant-Wide Specific Conditions [S2.c.](#) (See Comment 1)
 - ii. The owner or operator shall maintain records of their gasoline throughput in gal/yr. (Regulation 5.21)
- S3. Reporting (Regulation 2.17, section 5.2)**
- b. **VOC**
 - i. See Plant-Wide Specific Conditions [S3.a.](#)
 - ii. The plant-wide calendar month throughput (in gallons) and consecutive 12-month throughput (in gallons) for the chloroform, gasoline and distillate tanks in Specific Condition S1.a.ii. for each month in the reporting period.
 - c. **HAP**
See Plant-Wide Specific Conditions [S3.b.](#)
 - d. **TAC**
 - i. See Plant-Wide Specific Conditions [S3.c.](#)
 - ii. The owner or operator shall report their gal/yr gasoline throughput to demonstrate that they are below the 152,000,000 gal/yr gasoline limit to be environmentally acceptable. (Regulation 5.21)
 - iii. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions. (Regulation 5.21)

- iv. If there is any time that the VCU is bypassed or not in operation when the loading rack is operating, then the owner or operator shall keep a record of the following for each bypass event:
 - 1) Emission Unit ID number;
 - 2) The date and duration (including start and end date) during which the carbon adsorption vapor combustion unit VCU is bypassed or not in operation when the loading rack is operating;
 - 3) The quantity of Benzene emissions during the bypass in lb/yr;
 - 4) Summary of the cause or reason for each bypass event;
 - 5) Corrective action taken to minimize the extent or duration of the bypass event; and
 - 6) Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event;
 - 7) If no bypass occurred during the reporting period, the annual compliance report shall contain a declaration that there were no periods when the carbon adsorption vapor combustion unit VCU was bypassed or not in operation when the loading rack was operating during the reporting period.

If no bypass occurred during the reporting period, the annual compliance report shall contain a declaration that there were no periods when the VRU was bypassed or not in operation when the loading rack was operating during the reporting period.

- v. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)
- vi. The owner or operator shall submit the re-evaluated EA demonstration to the District within 6 months after a change of a raw material as described in Plant-wide Specific Condition [S2.c.ii](#). (Regulation 5.21)

S4. **Testing (Regulation 2.17, section 5.2)**

The owner or operator of any portable control device shall perform the following testing requirements.

a. **VOC**

- i. The owner or operator shall perform the required stack testing on the VCU once during the permit cycle. In conducting the performance tests required in 40 CFR 60.8 of the General Provisions, 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 40 CFR 60.8(b) of the General Provisions. The three-run requirement for the Performance Tests in 40 CFR 60.8(f) of the General Provisions does not apply to this subpart. (40 CFR 60.503(a))

- ii. Immediately before the performance test required to determine compliance with 40 CFR 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. (Regulations 40 CFR 60.503(b) and Regulation 6.21, section 5.3)
- iii. The owner or operator shall determine compliance with the Standard for VOC in 40 CFR 60.502(b) (Subpart XX) as follows: (40 CFR 60.503(c))
 - 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. (40 CFR 60.503(c)(1))
 - 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. (40 CFR 60.503(c)(2))
 - 3) The emission rate (E) of total organic compounds shall be computed using the following equation: (40 CFR 60.503(c)(3))

$$E = \sum_{i=1}^n (V_{esi} C_{ei}) / (L10^6)$$

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. (40 CFR 60.503(c)(4))
 - 5) Method 2B shall be used to determine the volume (V_{esi}) air-vapor mixture exhausted at each interval: (40 CFR 60.503(c)(5) and 40 CFR 60.503(c)(5)(i))
 - 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. (40 CFR 60.503(c)(6))
 - 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. (40CFR 60.503(c)(7))
- iv. The owner or operator shall determine compliance with the standard in 40 CFR 60.502(h) as follows: (40 CFR 60.503(d))
- 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. (40 CFR 60.503(d)(1))
 - 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. (40 CFR 60.503(d)(2))

- v. The owner or operator shall submit written compliance test plans (protocol) for the control efficiency. They shall include the EPA test methods that will be used for compliance testing, the process operating parameters that will be monitored during the compliance test, and the control device performance indicators that will be monitored during the compliance test. The compliance test plans shall be furnished to the District at least 30 days prior to the actual date of the compliance test. Attached to the permit is a Protocol Checklist for Performance Test for the information to be submitted in the protocol. (Regulation 2.17, section 5.2) (See Attachment A)
- b. **HAP**
See Plant-Wide Specific Conditions [S4.b.](#)
- c. **TAC**
There are no routine testing requirements for this pollutant.

U3 Comments

1. The District received a revised plant-wide environmental acceptability (EA) demonstration on August 18, 2015 and October 27, 2015.

The company demonstrated that emissions from Benzene were environmentally acceptable through modeling using controlled potential emissions and limiting gasoline throughput to 152,000,000 gal/yr.

Emission Unit	TAC	Maximum Ambient Concentration (µg/m ³)	BAC _C Benzene (µg/m ³)	Individual Process Risk, R _C	Individual Process EAG _C
U3, Truck Loading	Benzene	0.44223	0.45	0.98	1.0

Emission Unit	TAC	Maximum Ambient Concentration (µg/m ³)	BAC _{NC} Benzene (µg/m ³)	Individual Process Risk, R _{NC}	Individual Process EAG _{NC}
U3, Truck Loading	Benzene	0.44223	30	0.0147	1.0

Off-Permit Documents

A revised 1.05 Compliance Plan referenced in this permit was received on June 8, 2015.

Insignificant Activities

Equipment	Quantity	Regulation Basis
Natural gas, indirect heat exchangers less than 10 MMBtu/hr	1	Regulation 1.02, Appendix A, section 1.1
Internal combustion engines, whether fixed or mobile, and vehicles used for transport of passengers or freight, except as may be provided for in subsequent regulations	5	Regulation 1.02, Appendix A, section 2
Emergency relief vents, stacks and ventilating systems	1	Regulation 1.02, Appendix A, section 3.10

- 1) Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements.
- 2) Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements.
- 3) The owner or operator shall annually submit an updated list of insignificant activities that occurred during the preceding year, with the compliance certification due April 15th.
- 4) Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
- 5) The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions, or use Potential to Emit (PTE) as the annual emissions for each piece of equipment.
- 6) The District has determined that no monitoring, record keeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) unit.

Attachment A - Protocol Checklist for a Performance Test

A completed protocol should include the following information:

- 1. Facility name, location, and ID #;
- 2. Responsible Official and environmental contact names;
- 3. Permit numbers that are requiring the test to be conducted;
- 4. Test methods to be used (i.e. EPA Method 1, 2, 3, 4, and 5);
- 5. Alternative test methods or description of modifications to the test methods to be used;
- 6. Purpose of the test including equipment and pollutant to be tested; the purpose may be described in the permit that requires the test to be conducted or may be to show compliance with a federal regulation or emission standard;
- 7. Tentative test dates (These may change but the District will need final notice at least 10 days in advance of the actual test dates in order to arrange for observation.);
- 8. Maximum rated production capacity of the system;
- 9. Production-rate goal planned during the performance test for demonstration of compliance (if appropriate, based on limits);
- 10. Method to be used for determining rate of production during the performance test;
- 11. Method to be used for determining rate of production during subsequent operations of the process equipment to demonstrate compliance;
- 12. Description of normal operation cycles;
- 13. Discussion of operating conditions that tend to cause worse case emissions; it is especially important to clarify this if worst case emissions do not come from the maximum production rate;
- 14. Process flow diagram;
- 15. The type and manufacturer of the control equipment, if any;
- 16. The control equipment (baghouse, scrubber, condenser, etc.) parameter to be monitored and recorded during the performance test. Note that this data will be used to ensure representative operation during subsequent operations. These parameters can include pressure drops, flow rates, pH, and temperature. The values achieved during the test may be required during subsequent operations to describe what pressure drops, etcetera, are indicative of good operating performance; and
- 17. How quality assurance and accuracy of the data will be maintained, including;
 - Sample identification and chain-of-custody procedures
 - If audit samples are required for this test method, audit sample provider and number of audit samples to be used
- 18. Pipe, duct, stack, or flue diameter to be tested;
- 19. Distances from the testing sample ports to the nearest upstream and downstream flow disturbances such as bends, valves, constrictions, expansions, and exit points for outlet and additionally for inlet;
- 20. Determine number of traverse points to be tested for outlet and additionally for inlet if required using Appendix A-1 to 40 CFR Part 60;
 - Method 1 if stack diameter is >12"
 - Method 1a if stack diameter is greater than or equal to 4" and less than 12"
 - Alternate method of determination for <4"
 - If a sample location at least two stack or duct diameters downstream and half a diameter upstream from any flow disturbance is not available then an alternative procedure is available for determining the acceptability of a measurement location. This procedure described in Method 1, Section 11.5 allows for the determination of gas flow angles at the sampling points and comparison of the measured results with acceptability criteria.
- 21. The Stack Test Review fee shall be submitted with each stack test protocol.