Louisville Metro Air Pollution Control District
701 West Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137

Title V Operating Permit

Permit No.: O-0741-15-V(R1) Plant ID: 0741

Effective Date: 8/27/2015 Expiration Date: 8/31/2020
Revision Date: 06/29/2016

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:

Owner: MPLX Terminals, LLC
Source: MPLX Terminals, LLC—Algonquin Terminal
4510 Algonquin Parkway
Louisville, Kentucky 40211

The applicable procedures of District Regulation 2.16 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 eighteen (18) months and no later than six (6) months prior to the expiration date.

Permit Writer: Narathip Chitradon

Administratively Complete: 12/14/2013
Date of Public Notice: 07/12/2015
Date of Proposed Permit: 07/12/2015
Date of Administrative Revision Public Notice: 04/30/2016
Date of Administrative Revision Proposed Permit: 04/30/2016

Air Pollution Control Officer
June 29, 2016

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Permit Revisions/Changes

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Page No.	Description
Initial	87-97-TV	10/06/2000	04/23/2000	Initial	Entire Permit	Initial Permit Issuance
R1	87-97-TV(R1)	03/27/2009	12/01/2008	Minor	Entire Permit	5 year Renewal; Incorporate STAR Category 1 TAC requirements
R2	O-0741-15-V	08/27/2015	07/12/2015	Major	Entire Permit	5 year Renewal; Incorporated Construction Permits 110-09-C and 111-09-C; Incorporated Federal Regulation 40 CFR 63 Subpart BBBBBB
R3	O-0741-15-V(R1)	06/29/2016	04/30/2016	Minor	Entire Permit	Administrative Revision

Applications

Application #	Date Rec'd	Type
59998	10/15/2013	Renewal Application
67013	09/17/2014	Storage Tank Alternative Operating Scenario
68554	12/22/2014	Vacuum Trucks and FRAC Tanks Alternative Operating Scenario
69087	01/27/2015	Updated Administrative Information Form AP-100A
75254	02/16/2016	Updated 1.05 Compliance Plan
76184	04/04/2016	Updated Administrative Information Form AP-100A

Acronyms and Abbreviations

AP-42	- *AP-42, Compilation of Air Pollutant Emission Factors*, published by USEPA
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
MSDS	- Material Safety Data Sheet
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
SDS	- Safety Data Sheet
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

Title V of the Clean Air Act Amendments of 1990 (the Act) required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are: (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Louisville Metro Air Pollution Control District (LMAPCD or APCD) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations."

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit General Conditions define requirements that are generally applicable to all Title V companies under the jurisdiction of LMAPCD. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the General Conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The General Conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The owner or operator's Title V permit may include a current table of "insignificant activities."

Insignificant activities are defined in District Regulation 2.16 section 1.23, as of the date the permit was proposed for review by U.S. EPA, Region 4.

Insignificant activities identified in District Regulation 1.02, section 1.38, and Appendix A may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.

Insignificant activities identified in District Regulation 1.02, section 1.38, and Appendix A shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.

General Conditions

1. **Compliance** - The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State, and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. [Regulation 2.16, sections 4.1.3, 4.1.13.1, and 4.1.13.7]

2. **Compliance Certification** - The owner or operator shall certify, annually, or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification (Form 9400-O) directly to the EPA and to the District, as set forth in Regulation 2.16, section 4.3.5.4, at the following addresses:

   US EPA - Region IV
   Air Enforcement Branch
   Atlanta Federal Center
   61 Forsyth Street
   Atlanta, GA 30303-8960

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

   This certification must be postmarked by 15 April of the year following the year for which the certification is being submitted, or other such due date as required by another applicable regulation.

3. **Compliance Schedule** - The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:

   a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.

   b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.

4. **Duty to Supplement or Correct Application** - If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, they shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.

5. **Emergency Provision**

   a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations if the conditions in Regulation 2.16 are met. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

      i. An emergency occurred and that the owner or operator can identify the cause of the emergency;

      ii. The permitted facility was at the time being properly operated;

      iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit; and

      iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.

   b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.

   c. This condition is in addition to any emergency or upset provision contained in an applicable requirement. [Regulation 2.16, sections 4.7.1 through 4.7.4]

6. **Emission Fees Payment Requirements** - The owner or operator shall pay annual emission fees in accordance with Regulation 2.08, section 12.3. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. [Regulation 2.08, section 12.2.4]

7. **Emission Offset Requirements** - The owner or operator shall comply with the requirements of Regulation 2.04.

8. **Enforceability Requirements** - Except for the conditions that are specifically designated as District-Only Enforceable Conditions, all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. [Regulation 2.16, sections 4.2.1 and 4.2.2]

9. **Enforcement Action Defense**

   a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation. [Regulation 2.16, sections 4.1.13.2 and 4.1.13.3]

10. **Hazardous Air Pollutants and Sources Categories** - The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.

11. **Information Requests** - The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. [Regulation 2.16, section 4.1.13.6]

    If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA at the address shown in General Condition 35.b. [Regulation 2.07, section 10.2]

12. **Insignificant Activities** - The owner or operator shall:

    a. Notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. [Regulation 2.16, section 5]

    b. Submit a current list of insignificant activities by April 15 of each year with the annual compliance certification, including an identification of the additions and removals of insignificant activities that occurred during the preceding year. [Regulation 2.16, section 4.3.5.3.6]

13. **Inspection and Entry** - Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours: [Regulation 2.16, section 4.3.2]

    a. Enter the premises to inspect any emissions-related activity or records required in this permit.

    b. Have access to and copy records required by this permit.

    c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.

    d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements.

14. **Monitoring and Related Record Keeping and Reporting Requirement** - The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. 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. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be 1 January through 30 June and 1 July through 31 December of each

calendar year. All reports shall be sent to the District at the address shown in paragraph 2 of these General Conditions and must be postmarked by the 60th day following the end of each reporting period, unless specified elsewhere in this permit. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes. 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 semi-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 semi-annual compliance reports are due on or before the following dates of each calendar year:

Reporting Period	Report Due Date
January 1 - June 30	August 29
July 1 - December 31	March 1 of the following year

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.

15. **Off-permit Documents** - Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, section 5. [Regulation 2.16, section 4.1.5]

16. **Operational Flexibility** - The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.

17. **Permit Amendments (Administrative)** - This permit can be administratively amended by the District in accordance with Regulation 2.16, section 5.4.

18. **Permit Application Submittal** - The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.

19. **Permit Duration** - This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.

20. **Permit Renewal, Expiration and Application** - Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.

21. **Permit Revisions** - No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. [Regulation 2.16, section 4.1.16]

22. **Permit Revision Procedures (Minor)** - Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.

23. **Permit Revision Procedures (Significant)** - A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and Permit renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.

24. **Permit Termination and Revocation by the District** - The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1 through 5.11.6. For purposes of section 5.11.1, substantial or unresolved noncompliance includes, but is not limited to:

    a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment;

    b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District;

    c. Knowingly making any false statement in any permit application;

    d. Noncompliance with Regulation 1.07, section 4.2; or

    e. Noncompliance with KRS Chapter 77.

25. **Permit Shield** - The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.

26. **Prevention of Significant Deterioration of Air Quality** - The owner or operator shall comply with the requirements of Regulation 2.05.

27. **Property Rights** - This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.

28. **Public Participation** - Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, section 1; and 2.16, sections 5.1.1.2 and 5.5.4.

29. **Reopening For Cause** - This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.

30. **Reopening for Cause by EPA** - This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 section 5.10.

31. **Risk Management Plan (112(r))** - For each process subject to section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.

32. **Severability Clause** - The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific

circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected. [Regulation 2.16, section 4.1.12]

33. **Stack Height Considerations** - The owner or operator shall comply with the requirements of Regulation 2.10.

34. **Startups, Shutdowns, and Upset Conditions Requirements** - The owner or operator shall comply with the requirements of Regulation 1.07.

35. **Submittal of Reports, Data, Notifications, and Applications**

    a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.3, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.12 shall be submitted to:

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

    b. Documents that are specifically required to be submitted to EPA, as set forth in Regulation 2.16 sections 3.3 and 5.8.5 shall be mailed to EPA at:

    US EPA - Region IV
    APTMD - 12th floor
    Atlanta Federal Center
    61 Forsyth Street
    Atlanta, GA 30303-3104

36. **Other Applicable Regulations** - The owner or operator shall comply with all applicable requirements of the following:

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, Emission 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
1.14	Control of Fugitive Particulate Emissions
2.01	General Application (Permit Requirements)

Regulation	Title
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 Other 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
2.16	Title V Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)
7.02	Adoption and Incorporation by Reference of Federal New Source Performance Standards

District Only Enforceable Regulations:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors
2.08	Emission Fee, Permit Fees and Permit Renewal Procedures
5.00	Definitions
5.01	General Provisions
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

37. **Stratospheric Ozone Protection Requirements** - Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts A, B, and F. Those requirements include the following restrictions:

    a. Any facility having any refrigeration equipment that normally contains fifty (50) pounds of refrigerant or more must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added, according to 40 CFR 82.166;

    b. No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided in 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved according to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;

    c. No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or II substance in 40 CFR 82, Subpart A, Appendices A and B, except in compliance with 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;

    d. No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined in 40 CFR 82.152) for service, maintenance, or repair unless the person has been properly trained and certified according to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance according to 40 CFR 82.158 and unless the person observes the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;

    e. No person may dispose of appliances (except small appliances, as defined in 40 CFR 82.152) without using equipment certified for that type of appliance according to 40 CFR 82.158 and without observing the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;

    f. No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82 Subpart F;

    g. If the permittee manufactures, transforms, imports, or exports, a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), the permittee is subject to all requirements as specified in 40 CFR 82 Subpart A, Production and Consumption Controls. [Regulation 2.16, section 4.1.5]

Plant-wide[1]

Plant-wide Description

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
40 CFR 63 Subpart A	General Provisions	1 through 16
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 through 2
5.01	General Provisions	1 through 2
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants	1 through 3, 4.110, 5
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 7
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 U1 and 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 U4, Barge Loading, is not subject to 40 CFR Part 63 Subpart BBBBBB.

Plant-Wide Specific Conditions

S1. **Standards (Regulation 2.16, section 4.1.1)**

a. **VOC**

The owner or operator shall limit the total plant-wide VOC emissions from the plant to less than 100 tons during any consecutive 12-month period. [Regulation 2.16, section 4.1.1]

b. **HAP**

i. The owner or operator shall limit the total plant-wide combined HAPs emissions from the plant to less than 25 tons during any consecutive 12-month period. [Regulation 2.16, section 4.1.1]

ii. The owner or operator shall limit the total plant-wide single HAP emissions from the plant to less than 10 tons during any consecutive 12-month period for any single HAP. [Regulation 2.16, section 4.1.1]

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 records, and inspection of the source. [40 CFR 63.11085(a)]

iv. For storage tanks E3 and E22 through E26 in Emission Units U1 and U2, the owner or operator must equip each internal floating roof gasoline storage tank according to the requirements in 40 CFR 60.112b(a)(1) of Subpart Kb, except for the secondary seal requirements under 40 CFR 60.112b(a)(1)(ii)(B) and the requirements in 40 CFR 60.112b(a)(1)(iv) through (ix) of Subpart Kb. [Table 1, Option 2.(b), 40 CFR 63.11087(a)]

v. The owner or operator of a bulk gasoline terminal loading rack(s) with a gasoline throughput (total of all racks) of 250,000 gallons per day[2] or greater must meet each emission limit and management practice in Table 2 to this subpart that applies. [Table 2, Option 1, 40 CFR 63.11088(a)]

1) Equip the loading rack(s) with a vapor collection system designed to collect the TOC (Total Organic Compounds) vapors displaced from cargo tanks during product loading; and [Table 2, Option 1.(a), 40 CFR 63.11088(a)]

[2] 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.

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, Option 1.(b), 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, Option 1.(c), 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, Option 1.(d), 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 modeling or determined by the District to be *de minimis*.[3] [Regulations 5.01 and 5.21]

S2. **Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1-2)**

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**

The owner or operator shall maintain records, including calculations, of 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 2.16, section 4.1.9.1-2]

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 2.16, section 4.1.9.1-2]

[3] The District received an environmental acceptability (EA) demonstration on April 03, 2012 that provided TAC emissions from the facility. The company demonstrated that the storage tanks were environmentally acceptable due to the uncontrolled potential emissions being below de minimis levels. The company demonstrated that the truck loading rack operation was environmentally acceptable due to the controlled potential emissions being below de minimis levels. The company demonstrated that the barge loading rack operation was environmentally acceptable through modeling using controlled potential emissions.

ii. The owner or operator shall maintain a copy of the Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS) for each HAP-containing material used at the plant. The MSDS/SDS shall provide documentation of the weight percent of each individual HAP. [Regulation 2.16, section 4.1.9.1-2]

iii. For storage tanks E3 and E22 through E26 in Emission Units U1 and U2, the owner or operator shall keep records as specified in 40 CFR 60.115b of Subpart Kb if complying with options 2(a), 2(b), or 2(c) in Table 1 to this subpart, except records shall be kept for at least 5 years. [40 CFR 63.11094(a)]

iv. 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 40 CFR 63.11094(b)(1) through (3) of this section. [40 CFR 63.11094(b)]

1) Annual certification testing performed under 40 CFR 63.11092(f)(1) of Subpart BBBBBB (EPA Method 27) and periodic railcar bubble leak testing performed under 40 CFR 63.11092(f)(2) of Subpart BBBBBB. [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 or Periodic Railcar Bubble Leak Test Procedure. [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)]

v. 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 requirements in either 40 CFR 63.11094(c)(1) or 40 CFR 63.11094(c)(2). [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 40 CFR 63.11094(c)(1) of this section 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) of this section. [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 40 CFR 63.11094(c)(2) of this section 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 40 CFR 63.11094(c)(2) of this section. [40 CFR 63.11094(c)(2)(ii)]

vi. For storage tanks E3 and E22 through E26 in Emission Units U1 and U2, the owner or operator must perform inspections of the floating roof system according to the requirements of 40 CFR 60.113b(a) (Subpart Kb) if you are complying with option 2(b) in Table 1 to this subpart. [40 CFR 63.11092(e)(1)]

vii. Each owner or operator of a bulk gasoline terminal, bulk plant, pipeline breakout station, or pipeline pumping station subject to the provisions of this subpart shall perform a monthly leak inspection of all equipment in

gasoline service, as defined in 40 CFR 63.11100 of Subpart BBBBBB[4]. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR 63.11089(a)]

viii. A log book shall be used and shall be signed by the owner or operator at the completion of each inspection required by 40 CFR 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. [40 CFR 63.11089(b)]

ix. 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 under 40 CFR 63.11089(d) of this section. [40 CFR 63.11089(c)]

x. 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)]

xi. Each owner or operator subject to the equipment leak provisions of 40 CFR 63.11089 shall prepare and maintain a record describing the types, identification numbers, and locations of all equipment in gasoline service. For facilities electing to implement an instrument program under 40 CFR 63.11089, the record shall contain a full description of the program. [40 CFR 63.11094(d)]

xii. 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 40 CFR 63.11094(e)(1) through (7) of this section. [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] 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).

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)]

xiii. 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 (NOCS) required under 40 CFR 63.11093(b) of Subpart BBBBBB 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. [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)]

xiv. Each owner or operator of an affected source under this subpart shall keep records as specified in paragraphs 40 CFR 63.11094(g)(1) and 40 CFR 63.11094(2) of this section. [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/SDS, analysis of emissions, and/or modeling results. [Regulation 2.16, section 4.1.9.1-2]

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* at the time of the change. [Regulation 2.16, section 4.1.9.1-2]

iii. The owner or operator shall maintain a copy onsite of the MPLX Terminals' STAR Environmental Acceptability Determination and subsequent information provided to the District including all air dispersion modeling input parameters and the resulting associated environmental acceptability goal (EAG) or Risk[5] [Regulation 2.16, section 4.1.9.1-2]

Emission Unit	TAC	5-Year Average Maximum Ambient Concentration ($\mu g/m^3$)	BACc Benzene ($\mu g/m^3$)	Individual Process Risk, R_c	Individual Process EAG_C
U4, Barge Loading	Benzene	0.0020	0.45	0.004	1.0

[5] An initial STAR Environmental Acceptability Report was received by the District on December 19, 2006. Updated versions of the STAR Environmental Acceptability Report have been received by the District on April 10, 2007; August 27, 2008; August 02, 2010; and April 03, 2012. All TACs from the processes at the facility were below de minimis, except controlled benzene emissions for gasoline loading during the barge loading operation were above de minimis levels. In order to demonstrate environmental acceptability, the source performed Tier 4 modeling, using Industrial Source Complex Short-Term (ISCST3) Version 3, with a controlled emission rate of 440.3 lb/yr and noted the highest risk to be 0.004, which demonstrates that the company is below the environmental acceptability goal (EAG) of 1.0 for individual processes defined under District Regulation 5.21.

S3. **Reporting (Regulation 2.16, section 4.1.9.3)**

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 2.16, section 4.1.9.3]

ii. 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 2.16, section 4.1.9.3]

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 semi-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 2.16, section 4.1.9.3]

ii. The owner or operator shall identify all periods when the plant-wide HAP emission standards have been exceeded during the reporting period. The report shall include the following: [Regulation 2.16, section 4.1.9.3]

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 semi-annual compliance report shall contain a negative declaration that there were no periods of exceedance from the emission limitations during the reporting period.

iii. Each owner or operator of any affected source under 40 CFR 63 Subpart BBBBBB must submit additional notifications specified in the General Provisions of 40 CFR 63.9, (Subpart A) as applicable. [40 CFR 63.11093(d)]

iv. 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 options 2(a), 2(b), or 2(c) in Table 1 to this subpart, the information specified in the reporting and recordkeeping requirements of 40 CFR 60.115b(a), 60.115b(b), or 60.115b(c) of Subpart Kb, depending upon the control equipment installed. [40 CFR 63.11095(a)(1)]

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)]

v. 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 40 CFR 63.11095(b)(1) through (5) of this section. [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 BBBBBB. [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 BBBBBB. 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 BBBBBB 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)]

vi. 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 BBBBBB, 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 submit with the application for construction for any new emission unit the STAR EA Demonstration for all Category 1 through Category 4 TACs emitted from that emission unit.

ii. The owner or operator shall submit a *plant-wide* emissions-based EA Demonstration to the District showing compliance with the *plant-wide* EA goals of 7.5 for new and existing, 3.8 for all new combined, and 1.0 for each TAC from each process when a change occurs that increases emissions above *de minimis* or previously modeled values.

iii. If the TAC does not have an established BAC or *de minimis* value, the owner or operator shall calculate and report these values. The form located on the APCD website (http://louisvilleky.gov/government/air-pollution-control-district) may be used for determining BAC and *de minimis* values.

iv. 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]

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 S2.c.ii. [Regulation 5.21]

S4. **Testing (Regulation 2.16, section 4.3.1)**

a. **VOC**

There are no routine testing requirements for this pollutant.

b. **HAP**

i. 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)]

ii. 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 40 CFR 63.11092(a) through (d) of this section. [40 CFR 63.11092(a)]

1) Conduct a performance test on the vapor processing and collection systems according to either 40 CFR 63.11092(a)(1)(i) or 40 CFR 63.11092(a)(1)(ii) of this section. [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) of this chapter. [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 under 40 CFR 11092(a)(1) of this section.[6] [40 CFR 63.11092(a)(2)]

3) The owner or operator shall use the most recent District accepted performance test results to demonstrate compliance with the emission limits and in the annual emission inventory reporting. [Regulation 2.16, section 4.3.1]

[6] MPLX Terminals, LLC—Algonquin Terminal has elected to comply with the test alternative mentioned under 40 CFR 63.11092(a)(2). The company already performs the required testing mentioned in 40 CFR 60 Subpart XX under Emission Unit U3 – Truck Loading. The results obtained from this performance test are below the emission limit of 80 milligrams of VOC per liter of gasoline loaded—0.35 mg VOC/liter of gasoline loaded on June 04, 2015. Previously, MPLX Terminals conducted compliance testing on January 14, 2010.

4) The performance test requirements of 40 CFR 63.11092(a) do not apply to flares defined in 40 CFR 63.11100 of Subpart BBBBBB[7] and meeting the flare requirements in the General Provisions of 40 CFR 63.11(b) (Subpart A). The owner or operator shall demonstrate that the flare and associated vapor collection system is in compliance with the requirements in the General Provisions of 40 CFR 63.11(b) (Subpart A) and the Standards of Performance for Bulk Gasoline Terminals in 40 CFR 60.503(a), (b), and (d) (Subpart XX). [40 CFR 63.11092(a)(4)]

iii. 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 40 CFR 11092(b)(1) through (5) of this section. For each facility conducting a performance test under 40 CFR 11092(a)(1) of this section, and for each facility utilizing the provisions of 40 CFR 11092(a)(2) or (a)(3) of this section, the CMS must be installed by January 10, 2011. [40 CFR 63.11092(b)]

1) For each performance test conducted under 40 CFR 11092(a)(1) of this section, the owner or operator shall determine a monitored operating parameter value for the vapor processing system using the procedures specified in 40 CFR 11092(b)(1)(i) through (iv) of this section. During the performance test, continuously record the operating parameter as specified under 40 CFR 11092(b)(1)(i) through (iv) of this section.[8] [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 40 CFR 11092(b)(1)(i)(A) or (B). [40 CFR 63.11092(b)(1)(i)]

(i) A continuous emissions monitoring system (CEMS) capable of measuring organic compound concentration shall be installed in the exhaust air stream. [40 CFR 63.11092(b)(1)(i)(A)]

(ii) As an alternative to 40 CFR 63.11092(b)(1)(i)(A) of this section, you may choose to meet the

[7] As defined in 40 CFR 63.11100 of Subpart BBBBBB, a flare means a thermal oxidation system using an open (without enclosure) flame

[8] MPLX Terminals, LLC—Algonquin Terminal has elected to observe vacuum level and temperature as their monitor operating parameter values for the vapor recovery unit (VRU). The lowest maximum required vacuum level needed to assure regeneration of the carbon beds in the VRU is 24" Hg. The temperature of a carbon bed in the VRU shall not exceed 200 °F during any individual regeneration cycle. These parameter values were obtained from the revised NOCS received on January 26, 2015.

requirements listed in 40 CFR 63.11092(b)(1)(i)(B)(*1*) and (*2*) of this section. [40 CFR 63.11092(b)(1)(i)(B)]

(1) Carbon adsorption devices shall be monitored as specified in 40 CFR 63.11092(b)(1)(i)(B)(*1*)(*i*),(*ii*), and (*iii*). [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.[9] 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 of the General Provisions), 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

[9] MPLX Terminals, LLC—Algonquin Terminal performs semi-annual maintenance checks on the vapor recovery unit (VRU) and keeps records of the results. The testing for the carbon in each carbon bed is performed on the second of the two maintenance checks.

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 40 CFR 63.11092(b)(1)(i)(B)(*2*)(*i*) through (*v*) of this section. [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.[10] [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

[10] For MPLX Terminals, LLC—Algonquin Terminal, the lowest maximum required vacuum level needed to assure regeneration of the carbon beds in the VRU is 24" Hg, as provided in the revised NOCS received on January 26, 2015.

the system. [40 CFR 63.11092(b)(1)(i)(B)(2)(iii)]

d) The monitoring plan developed under 40 CFR 63.11092(b)(1)(i)(B)(*2*) of this section shall specify conditions that would be considered malfunctions of the carbon adsorption system during the inspections or automated monitoring performed under 40 CFR 63.11092(b)(1)(i)(B)(*2*)(*i*) through (*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)(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 40 CFR 63.11092(b)(1)(iii) (B).[11] [40 CFR 63.11092(b)(1)(iii)]

(i) As an alternative to 40 CFR 63.11092(b)(1)(iii)(A) of this section, the owner or operator may choose to meet the requirements listed in 40 CFR 63.11092(b)(1)(iii)(B)(*1*) and (*2*). [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)(1)(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 40 CFR 63.11092(b)(1)(iii)(B)(*2*)(*i*) through (*v*). [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

[11] MPLX Terminals, LLC—Algonquin Terminal has elected to follow the requirements listed under the option of 40 CFR 63.11092(b)(1)(iii)(B) for the portable vapor combustion unit (PVCU).

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(b)(1)(iii)(B)(*2*) shall specify conditions that would be considered malfunctions of the thermal oxidation system during the inspections or automated monitoring performed under 40 CFR 63.11092(b)(1)(iii)(B)(*2*)(*ii*) and (*iii*), 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 63.11092(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) Where a flare meeting the requirements in 40 CFR 63.11(b) of the General Provisions is used, a heat-sensing device, such as an ultraviolet beam sensor or a thermocouple, must be installed in proximity to the pilot light to indicate the presence of a flame. [40 CFR 63.11092(b)(2)]

3) 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)]

4) 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)]

5) 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) of this section, the monitored operating parameter value may be determined according to the provisions in 40 CFR 63.11092(b)(5)(i) or 40 CFR 63.11092(b)(5)(ii) of this section.[12] [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 40 CFR 63.11092(b) of this section. [40 CFR 63.11092(b)(5)(i)]

[12] MPLX Terminals, LLC—Algonquin Terminal has elected to observe vacuum level and temperature as their monitor operating parameter values for the vapor recovery unit (VRU). The lowest maximum required vacuum level needed to assure regeneration of the carbon beds in the VRU is 24" Hg. The temperature of a carbon bed in the VRU shall not exceed 200 °F during any individual regeneration cycle. These parameter values were obtained from the revised NOCS received on January 26, 2015

(b) Determine an operating parameter value based on engineering assessment and the manufacturer's recommendation and submit the information specified in 40 CFR 63.11092(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 40 CFR 63.11092(b) of this section. [40 CFR 63.11092(b)(5)(ii)]

iv. For performance tests performed after the initial test required under 40 CFR 63.11092(a) of this section, 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)]

v. Each owner or operator of a bulk gasoline terminal subject to the provisions of this subpart shall comply with the requirements in 40 CFR 63.11092(d)(1) through (4) of this section. [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) of this section. [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) of this section 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), except as specified in 40 CFR 63.11092(d)(4) of this section. [40 CFR 63.11092(d)(3)]

4) For the monitoring and inspection, as required under 40 CFR 63.11092(b)(1)(i)(B)(*2*) and 40 CFR 63.11092(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) 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)]

vi. The annual certification test for gasoline cargo tanks shall consist of the test methods specified in 40 CFR 63.11092(f)(1) or (f)(2) of this section. Affected facilities that are subject to subpart XX of 40 CFR part 60 may elect, after notification to the subpart XX delegated authority, to comply with 40 CFR 63.11092(f)(1) and (2) of this section. [40 CFR 63.11092(f)]

1) *EPA Method 27, Appendix A–8, 40 CFR part 60*. 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 (Δ p, Δ v) for all affected gasoline cargo tanks is 3 inches of water, or less, in 5 minutes. [40 CFR 63.11092(f)(1)]

2) *Railcar bubble leak test procedures*. As an alternative to the annual certification test required under 40 CFR 63.11092(f)(1) of this section for certification leakage testing of gasoline cargo tanks, the owner or operator may comply with 40 CFR 63.11092(f)(2)(i) and (ii) of this section for railcar cargo tanks, provided the railcar cargo tank meets the requirement in 40 CFR 63.11092(f)(2)(iii) of this section. [40 CFR 63.11092(f)(2)]

(a) Comply with the requirements of 49 CFR 173.31(d), 49 CFR 179.7, 49 CFR 180.509, and 49 CFR 180.511 for the periodic testing of railcar cargo tanks. [40 CFR 63.11092(f)(2)(i)]

(b) The leakage pressure test procedure required under 49 CFR 180.509(j) and used to show no indication of leakage under 49 CFR 180.511(f) shall be ASTM E 515–95, BS EN 1593:1999, or another bubble leak test procedure meeting

the requirements in 49 CFR 179.7, 49 CFR 180.505, and 49 CFR 180.509. [40 CFR 63.11092(f)(2)(ii)]

(c) The alternative requirements in this 40 CFR 63.11092(f)(2) may not be used for any railcar cargo tank that collects gasoline vapors from a vapor balance system and the system complies with a Federal, State, local, or tribal rule or permit. A vapor balance system is a piping and collection system designed to collect gasoline vapors displaced from a storage vessel, barge, or other container being loaded, and routes the displaced gasoline vapors into the railcar cargo tank from which liquid gasoline is being unloaded. [40 CFR 63.11092(f)(2)(iii)]

vii. *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 for this pollutant.

Alternative Operating Scenario

The owner or operator is authorized to rent and bring onsite vacuum trucks and portable, horizontal fixed-roof storage (FRAC) tanks for temporary use. The vacuum trucks are for transferring gasoline, ethanol, fuel oil, gasoline additives, and other volatile organic compounds from spills and pipeline work, as well as for emptying stationary storage tanks. The FRAC tanks are for temporary storage of gasoline, ethanol, fuel oil, gasoline additives, and other volatile organic compounds. Each has a capacity of no more than 21,000 gallons. The facility shall continue to calculate emissions from this equipment to ensure compliance is maintained.

Emission Units U1 and U2: Storage Tanks

U1 and U2 Unit Description

Multiple storage tanks containing various gasoline products.

U1 and U2 Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
1.02	Definitions	Appendix A
6.13	Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds	1 through 5
6.43	Volatile Organic Compound Emission Reduction Requirements	1 through 4, 8
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	1 through 5, 7
40 CFR 60 Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	110a through 113a
40 CFR 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	110b through 113b, 115b, 116b
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 through 2
5.01	General Provisions	1 through 2
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants	1, 2, 4.110
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 7
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, 3.1, 3.22, 3.23, 3.24

U1 and U2 Equipment

Emission Unit	Emission Point ID	Product Stored	Maximum Capacity (gallons)	Roof Type [a]	Date Installed	Applicable Regulations							
						IA[b]	6.13	6.43	7.12	Ka	Kb	6B[c]	STAR[d]
U1	E3 (T-60)	Petroleum Products[g]	1,680,000	CIF	1980			X	X	X		X	X
U1	E4 (T-61)	Petroleum Products[g]	840,000	CIF	1985				X		X		X
U1	E5 (T-165)	Petroleum Products[g]	2,814,000	CIF	1990			X	X		X		X
U1	E6 (T-119)	Petroleum Products[g]	2,268,000	CIF	2006				X		X		X
U1	E7 (T-156)	Petroleum Products[g]	2,261,520	CIF	2006			X	X		X		X
U1	E8 (T-157)	Petroleum Products[g]	2,291,520	CIF	2006			X	X		X		X
U1	E9 (T-26)	Petroleum Products[g]	1,561,686	CIF	2002			X	X		X		X
U1	E10 (T-14)	Petroleum Products[g]	963,000	CIF	2000			X	X		X		X
U1	E11 (T-48)	Petroleum Products[g]	947,016	CIF	1999			X	X		X		X
U2	E16 (T-174)	Additive	10,000	HFR	1993				X				X
U2	E17 (T-175)	Additive	3,027	HFR	2004				X				X
U2	E18 (T-176)	Transmix	10,000	HFR	2005				X				X
U2	E19 (T-177)	Additive	500	FR	2005				X				X
U2	E20 (T-178)	Additive	8,000	HFR	2005				X				X
U1	E22 (T-113)	Petroleum Products[g]	2,349,900	CIF	1947		X	X				X	X

Emission Unit	Emission Point ID	Product Stored	Maximum Capacity (gallons)	Roof Type [a]	Date Installed	Applicable Regulations							
						IA[b]	6.13	6.43	7.12	Ka	Kb	6B[c]	STAR[d]
U1	E23 (T-130)	Petroleum Products[g]	2,142,000	CIF	1973		X	X				X	X
U1	E24 (T-133)	Petroleum Products[g]	2,268,020	CIF	1964		X	X				X	X
U1	E25 (T-162)	Petroleum Products[g]	4,032,000	CIF	1967		X	X				X	X
U1	E26 (T-106)	Petroleum Products[g]	3,214,134	CIF	1972		X	X				X	X
U2	E30[f] (T-179)	Additive	350	HFR	2005				X				X
IA[be]	E32 (T-183)	Additive	117	Tote	2003	X							
IA[be]	E33 (T-96)	Diesel/ Kerosene/ Gas Oil/ Aviation Turbine Fuel	1,475,040	CFR	1948	X							
IA[be]	E34 (T-97)	Diesel/ Kerosene/ Gas Oil/ Aviation Turbine Fuel	1,463,070	CFR	1949	X							
IA[be]	E35 (T-98)	Diesel/ Kerosene/ Gas Oil/ Aviation Turbine Fuel	1,471,974	CFR	1949	X							
IA[be]	E36 (T-132)	Diesel/ Kerosene/ Gas Oil/ Aviation Turbine Fuel	535,261	CFR	1961	X							
IA[be]	E37 (T-164)	Diesel/ Kerosene/ Gas Oil/ Aviation Turbine Fuel	3,250,044	CFR	1990	X							
IA[be]	E38 (T-166)	Diesel/ Kerosene/ Gas Oil/ Aviation Turbine Fuel	4,034,334	CFR	1991	X							
IA[be]	E39 (T-167)	Diesel/ Kerosene/ Gas Oil/ Aviation Turbine Fuel	3,273,341	CFR	1991	X							

Emission Unit	Emission Point ID	Product Stored	Maximum Capacity (gallons)	Roof Type [a]	Date Installed	Applicable Regulations							
						IA[b]	6.13	6.43	7.12	Ka	Kb	6B[c]	STAR[d]
IA[be]	E40 (T-169)	Diesel/ Kerosene/ Gas Oil/ Aviation Turbine Fuel	3,279,108	CFR	1992	X							

[a] The roof types are the following:

FR – Vertical, Fixed Roof Storage Tank
IFR – Vertical, Internal Floating Roof Storage Tank
CFR - Coned, Vertical, Fixed Roof Storage Tank
CIF – Coned, Vertical, Internal Floating Roof Storage Tank
DIF – Domed, Vertical, Internal Floating Roof Storage Tank
HFR – Horizontal, Fixed-Roof Storage Tank

[b] Insignificant Activity. These storage tanks store product that meet the exemption requirements of District Regulation 1.02, Appendix A, Section 3.9.2 or 3.24.
[c] Federal Regulation 40 CFR 63 Subpart BBBBBB
[d] STAR Regulations include District Regulations 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23.
[e] Storage tank was previously listed under the Insignificant Activities Section of Permit 87-97-TV(R1).
[f] Company is supplied with three to four, 250 gallon totes of additive from its supplier. One of the totes gets connected to Tank 179 and gravity fed to refill tank 179. Any empty totes get replaced with full totes by the supplier.
[g] Petroleum products that can possibly be stored in the storage tanks may include, but are not limited to, gasoline, ethanol, diesel, kerosene, jet fuel, natural gasoline, naphthalene, gas oil, and light cycle oil.

U1 and U2 Controls

There are no control devices associated with Emission Units U1 and U2.

U1 and U2 Specific Conditions

S1. **Standards (Regulation 2.16, section 4.1.1)**

a. **VOC**

i. See Plant-Wide Specific Conditions S1.a.

ii. The owner or operator shall install, operate, and maintain internal floating roofs for all gasoline storage tanks with a capacity greater than 39,000 gallons. [Regulation 6.43, section 8.1]

For storage tanks E32 through E40, listed as "IA" under the U1 and U2 Equipment table:

iii. The owner or operator shall not store lubricating oil or fuel oil products with an as stored vapor pressure of greater than or equal to 10 mmHg (0.19 psi). [Regulation 2.16, section 4.1.1]

For storage tanks subject to Regulation 6.13 and 7.12:

iv. The storage tanks shall store materials with an as stored vapor pressure of greater than or equal to 1.5 psia. [Regulation 6.13 and 7.12, section 1]

v. For storage tanks E3 through E11, and E22 through E26, if the true vapor pressure of the volatile organic compounds as stored, is equal to or greater than 78 mm Hg (1.5 psia) but not greater than 570 mm Hg (11.1 psia), the owner or operator shall equip the storage vessels with a floating roof, a vapor recovery system, or their equivalents[13]. [Regulation 6.13 and 7.12, section 3.1]

vi. For storage tanks E3 through E11, E16 through E20, E22 through E26, and E30, if the true vapor pressure of the volatile organic compound, as stored, is equal to or greater than 1.5 psia, the owner or operator shall equip the storage vessels with a permanent submerged fill pipe[14]. [Regulation 6.13 and 7.12, section 3.3]

For storage tanks E3 through E11 and E22 through E26 subject to Regulation 40 CFR 60 Subpart Kb and as referenced by Regulation 6.43:

vii. The owner or operator of each storage vessel 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)]

[13] A revised 1.05 compliance plan that was received on December 19, 2014 states that each of these storage tanks have been fitted with an internal floating roof.

[14] A revised 1.05 compliance plan that was received on December 19, 2014 states that all the storage tanks at the facility are equipped with submerged fill pipes.

1) A fixed roof in combination with an internal floating roof meeting the following specifications[15]: [40 CFR 60.112b(a)(1)]

(a) 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)]

(b) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof. All gasoline storage tanks at MPLX Terminals, LLC—Algonquin Terminal shall meet the floating roof seal requirements:[16] [40 CFR 60.112b(a)(1)(ii), Regulation 6.43, section 8.2]

(i) A foam or liquid filled seal mounted in contact with the liquid (liquid mounted seal). A liquid mounted seal means a foam or liquid filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank. [40 CFR 60.112b(a)(1)(ii)(A)]

(ii) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor mounted, but both must be continuous. [40 CFR 60.112b(a)(1)(ii)(B)]

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

[15] A revised 1.05 compliance plan that was received on December 19, 2014 states that each of these storage tanks have been fitted with an internal floating roof.
[16] Regulation 6.43 requires gasoline storage tanks at this facility to meet the seal requirements of 40 CFR 60 Subpart Kb.

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

(c) 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)]

(d) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (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)]

(e) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [40 CFR 60.112b(a)(1)(v)]

(f) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [40 CFR 60.112b(a)(1)(vi)]

(g) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening. [40 CFR 60.112b(a)(1)(vii)]

(h) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. [40 CFR 60.112b(a)(1)(viii)]

(i) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)]

b. **HAP**

See Plant-Wide Specific Conditions S1.b.

c. **TAC**

See Plant-Wide Specific Condition S1.c.[17] [Regulations 5.01 and 5.21]

S2. **Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1-2)**

Records shall be readily retrievable and shall be maintained for five (5) years prior to disposal unless otherwise specified in the permit. 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 maintain readily accessible records of the material stored in each storage vessel. If the contents of the storage vessels are changed, a record shall be made of the new contents, the new vapor pressure, and the date of the change in service. [Regulation 2.16, sections 4.1.9.1-2]

For storage tanks E32 through E40, listed as "IA" under the U1 and U2 Equipment table:

iii. The owner or operator shall maintain a copy of the Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS) for each of the products found in the storage tanks. The MSDS/SDS shall provide documentation of the content and vapor pressure contained in each storage tank. [Regulation 2.16, section 4.1.9.1-2]

For storage tanks subject to Regulation 6.13 and 7.12:

iv. For storage tanks E3 through E11, and E22 through E26, there shall be no visible holes, tears, or other openings in the seal or any seal fabric. (Regulations 6.13 and 7.12, section 4.1)

v. For storage tanks E3 through E11, E16 through E20, E22 through E26, and E30, the owner or operator shall ensure that all openings, except stub drains, shall be equipped with covers, lids, or seals such that: (Regulations 6.13 and 7.12, section 4.2)

1) The cover, lid, or seal is in the closed position at all times except when in actual use; and (Regulations 6.13 and 7.12, section 4.2.1)

[17] The District received an updated environmental acceptability (EA) demonstration on April 03, 2012 that provided TAC emissions for the company's storage tanks. The information in the report demonstrated that the uncontrolled potential emissions from the storage tanks can be classified as de minimis.

2) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and (Regulations 6.13 and 7.12, section 4.2.2)

3) 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. (Regulations 6.13 and 7.12, section 4.2.3)

vi. 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 and 7.12, section 5.2]

For storage tanks E3 through E11 and E22 through E26 subject to Regulation 40 CFR 60 Subpart Kb and as referenced by Regulation 6.43:

vii. 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)]

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), Regulation 6.43, section 8.2]

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), Regulation 6.43, section 8.2]

(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)]

viii. 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)]

ix. 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)]

x. The owner or operator shall keep copies of all records required by the Monitoring of Operations section of 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)]

xi. 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 m^3 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)]

xii. Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the District specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)]

b. **HAP**

See Plant-Wide Specific Condition S2.b.

c. **TAC**

See Plant-Wide Specific Condition S2.c.

S3. **Reporting (Regulation 2.16, section 4.1.9.3)**

a. **VOC**

i. See Plant-Wide Specific Conditions S3.a.

For storage tanks E32 through E40, listed as "IA" under the U1 and U2 Equipment table:

ii. If the owner or operator wishes to store a material other than a lubricating or fuel oil product with an as stored vapor pressure of greater than or equal to 10 mmHg, a notification and application shall be submitted prior to the change in accordance with District Regulation 2.03. [Regulation 2.16, section 4.1.9.3]

For storage tanks subject to Regulation 6.13 and 7.12:

iii. There are no routine reporting requirements for this equipment.

For storage tanks E3 through E11 and E22 through E26 subject to Regulation 40 CFR 60 Subpart Kb and as referenced by Regulation 6.43:

iv. 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) in Subpart Kb. 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), Regulation 6.43, section 8.2]

2) If any of the conditions described in the Testing and Procedures of 40 CFR 60.113b(a)(2) (Subpart Kb) are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2) (Subpart Kb), 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), Regulation 6.43, section 8.2]

3) After each inspection required by the Testing and Procedures of 40 CFR 60.113b(a)(3) (Subpart Kb) 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) (Subpart Kb), 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) (Subpart Kb) and list each repair made. [40 CFR 60.115b(a)(4), Regulation 6.43, section 8.2]

v. 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 m^3 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.

c. **TAC**

See Plant-Wide Specific Condition S3.c.

Alternative Operating Scenario

MPLX Terminals has 14 coned, vertical, internal floating roof storage tanks that are subject to District and/or Federal regulations[18]. The owner or operator is allowed to switch between gasoline and other products that are held in these storage tanks. These other products include ethanol, distillate (diesel, kerosene, jet fuel), natural gasoline, naphthalene, and gas oil. For any product changes that occur, MPLX Terminals shall follow any applicable regulations in this Emission Unit that apply. MPLX Terminals shall continue to maintain submerged fill for all 14 storage tanks. At the time these storage tanks are converted back to gasoline or a product that makes the storage tank subject to a regulation in this emission unit, the company shall perform a seal inspection and provide a return-to-service notification 30 days prior to returning the tank back to service. For any product changes that occur, the facility shall continue to calculate emissions from this equipment to ensure compliance is maintained.

[18] The storage tanks are listed under Emission Point IDs E3, E4, E5, E6, E7, E8, E9, E10, E11, E22, E23, E24, E25, and E26. The company has also given them Tank IDs T-60, T-61, T-165, T-119, T-156, T-157, T-26, T-14, T-48, T-113, T-130, T-133, T-162, and T-106, respectively.

Emission Unit U3: Truck Loading Rack

U3 Unit Description

One (1) terminal truck loading rack with control units used to load various finished petroleum products from the bulk terminal storage tanks into cargo tanks for distribution to consumers.

U3 Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
1.04	Performance Tests	1 through 3
7.20	Standard of Performance for New Gasoline Loading Facilities at Bulk Plants	1 through 5
7.22	Standard of Performance for New Volatile Organic Materials Loading Facilities	1 through 4
40 CFR 60 Subpart A	General Provisions	1 through 18
40 CFR 60 Subpart XX	Standards of Performance for Bulk Gasoline Terminals	500 through 503, 505
40 CFR 63 Subpart R	National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)	63.420(a, c, d, e, f), 63.428(i, j)
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 through 2
5.01	General Provisions	1 through 2
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants	1, 2, 4.16
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 7
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, 3.1, 3.62

U3 Equipment

Emission Point ID	Description Make/Model	Maximum Capacity	Control Device (Control ID)	Stack ID	Installation Date
E1	One (1) truck loading rack consisting of six (6) bays	25,000 gal/hr/lane	C1 & C3	S1 & S3	1999

U3 Controls

Control ID	Description	Make/Model	Pollutant Controlled	Installation Date
C1	One (1) dual-bed carbon adsorption vapor recovery unit (VRU) used for collecting and controlling gasoline vapors from the bulk terminal loading rack operations	John Zink Model AATT/Z-1650-10-10-10-5	VOC	1999
C3	One (1) portable vapor combustion unit (PVCU or flare) used as a backup control unit for loading rack	The following include, but are not limited to, possible models[19] that can be temporarily used by the terminal, depending on availability and service needs: 1) R.A. Nichols Engineering (RANE1), Model RAN P4E11DB, S/N E19/B9 2) R.A. Nichols Engineering (RANE2), Model RAN P4E11DB, S/N E21/B10 3) R.A. Nichols Engineering (RANE3), Model RAN P4E11DB, S/N E23/B12 4) John Zink Flare 1, Model GV-LH-8400-2 5) John Zink Flare 2, Model LX10X25	VOC	2003

[19] The John Zink portable vapor combustion units are open flare design and the RANE vapor combustion units are an enclosed flare design.

U3 Specific Conditions

S1. **Standards (Regulation 2.16, section 4.1.1)**

a. **VOC**

i. See Plant-Wide Specific Conditions S1.a.

ii. Loading of gasoline is not allowed unless the emissions are being controlled by the carbon adsorption unit or a PVCU/flare.[20] The owner or operator shall control the emissions from the terminal loading rack with a portable vapor combustion unit (enclosed or open flare) during all periods of loading gasoline when the vapor recovery unit (VRU) is offline. [Regulation 2.16, section 4.1.1]

iii. The owner or operator shall not allow or cause the throughput of the following product types to exceed the limits during any consecutive 12-month period for the truck loading operation: [Regulation 2.16, section 4.1.1, Regulation 1.05 Compliance Plan, revised December 2014]

Limit (gal/12-month period)	Product
300,000,000	Gasoline and Ethanol combined
300,000,000	Fuel Oil

iv. For the VRU, the owner or operator shall maintain the maximum vacuum pulled during the regeneration cycle at or above 24 inches of mercury. [Regulation 2.16, section 4.1.1, Regulation 1.05 Compliance Plan, revised December 2014]

v. For the VRU, the owner or operator shall maintain the gasoline supply temperature at or below 98 °F. [Regulation 2.16, section 4.1.1, Regulation 1.05 Compliance Plan, revised December 2014]

For Regulation 7.20:

vi. The owner or operator of an affected facility shall install, maintain and operate: [Regulation 7.20, Section 3.1]

1) A vapor balance system for filling of stationary storage tanks from transport vehicle tanks and filling of transport vehicle tanks from stationary storage tanks. [Regulation 7.20, Section 3.1.2]

[20] The terminal loading rack at MPLX Terminals, LLC—Algonquin Terminal automatically shuts down if the control device is not operating. If there is an upset or malfunction, the loading and control device automatically shuts down.

2) For loading into transport vehicle tanks, either a submerged filled tube system or a bottom fill system. [Regulation 7.20, Section 3.1.3]

vii. The vapor balance system shall be equipped with fittings which are vapor tight and will automatically close upon disconnection so as to prevent the release of organic material. [Regulation 7.20, Section 3.2]

viii. The cross-sectional area of the vapor return hose must be at least 50% of the cross-sectional area of the liquid fill line and free of flow restrictions. [Regulation 7.20, Section 3.3]

ix. The vapor balance system must be equipped with interlocking devices which prevent transfer of gasoline until the vapor return hose is connected. [Regulation 7.20, Section 3.4]

x. Transport vehicle tank hatches shall be closed at all times during loading operations. [Regulation 7.20, Section 3.5]

xi. There shall be no leaks from the pressure/vacuum relief valves and hatch covers of the stationary storage tanks during loading. [Regulation 7.20, Section 3.6]

xii. The pressure relief valves on storage vessels and tank trucks or trailers shall be set to release at no less than 0.7 psig unless a lower setting is required by applicable fire codes. [Regulation 7.20, Section 3.7]

xiii. The owner or operator shall not load gasoline into any transport vehicle or receive gasoline from any transport vehicle which does not have proper fittings for connection of the vapor balance system, nor shall the owner or operator load or receive gasoline unless the vapor balance system is properly connected and in good working order. Except as provided in Regulation 7.20, Section 3.9, the fittings on the transport vehicle tanks must be vapor tight and automatically close upon disconnection so as to prevent the release of organic material. [Regulation 7.20, Section 3.8]

xiv. The following shall apply to the loading of a transport vehicle tank by means of a submerged fill tube system: [Regulation 7.20, Section 3.9]

1) When inserted into the tank, the submerged fill tube system must form a vapor tight seal with the tank; and [Regulation 7.20, Section 3.9.1]

2) Tank hatches are to be opened for the minimum time necessary to insert or remove the submerged fill tube system. [Regulation 7.20, Section 3.9.2]

xv. No owner or operator shall permit gasoline to be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation. [Regulation 7.20, Section 3.10]

xvi. The owner or operator shall not allow loading of a tank truck unless the following provisions are met: [Regulation 7.20, Section 3.11]

1) The tank truck has a valid Kentucky pressure-vacuum test sticker attached and visibly displayed; [Regulation 7.20, Section 3.11.1]

2) The vapor balance system and associated equipment are designed and operated to prevent gauge pressure in the tank truck from exceeding l8 inches of water and prevent vacuum from exceeding six inches of water; [Regulation 7.20, Section 3.11.2]

3) A pressure tap or any equivalent system as approved by the District is installed on the vapor balance system so that a liquid manometer supplied by the District can be connected by an inspector to the tap in order to determine compliance with section 3.11.2. The pressure tap shall be installed by the owner or operator as close as possible to the connection with the delivery tank, and shall consist of a 1/4 inch tubing connector which is compatible with the use of 3/16 inch inside diameter plastic tubing; and [Regulation 7.20, Section 3.11.3]

4) During loading, there is no reading greater than or equal to 100% of the lower explosive limit (LEL, measured as propane) at a distance of 2.5 centimeters around the perimeter of a potential leak source associated with the vapor balance system of a bulk gasoline plant as detected by a combustible gas detector using the test procedure in section 5. [Regulation 7.20, Section 3.11.4]

For Regulation 7.22:

xvii. No owner or operator of any loading facility from which 20,000 gallons or more of volatile organic materials are loaded in any one day shall load such materials unless such facility is equipped with a device that reduces the emissions of all hydrocarbon vapors and gases by at least 90% by weight that is properly installed, in good working order, and in operation. Loading shall be accomplished in such a manner that all displaced vapor and air will be vented only to the vapor recovery system. Measures shall be taken to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected. [Regulation 7.22, Section 3.2]

For Regulation 40 CFR 60 Subpart XX:

xviii. Each affected facility shall be equipped with a vapor collection system designed to collect the total organic compound vapors displaced from tank trucks during product loading. [40 CFR 60.502(a)]

xix. 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 9 milligrams of total organic compound per liter of gasoline loaded. [40 CFR 60.502(b)][21]

xx. 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)]

xxi. Loading of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures: [40 CFR 60.502(e)]

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 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)]

3) The owner or operator shall cross-check each tank identification number obtained in 40 CFR 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)]

(a) If less than an average of one gasoline tank truck per month over the last 26 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed each quarter; or [40 CFR 60.502(e)(3)(i)(A)]

(b) If less than an average of one gasoline tank truck per month over the last 52 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed semi-annually. [40 CFR 60.502(e)(3)(i)(B)]

[21] The VOC emission standard for Bulk Gasoline Terminals subject to 40 CFR Part 60, Subpart XX is 35 mg VOC/liter of gasoline loaded; however, MPLX Terminals, LLC—Algonquin Terminal requested an emission limit of 9 mg VOC/liter of gasoline loaded. MPLX Terminals, LLC—Algonquin Terminal conducted compliance testing on June 04, 2015 to determine the VOC emissions from the loading of gasoline into tanker trucks. The VOC emission rate was 0.35 mg VOC/liter of gasoline loaded. MPLX Terminals previously conducted a performance test on January 14, 2010.

(c) 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)]

4) The terminal owner or operator shall notify the owner or operator of each non-vapor-tight gasoline tank truck loaded at the affected facility within 1 week of the documentation cross-check in 40 CFR 502.(e)(3) of Subpart XX. [40 CFR 60.502(e)(4)]

5) The terminal 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)]

6) Alternative procedures to those described in 40 CFR 502(e)(1) through (5) of Subpart XX for limiting gasoline tank truck loadings may be used upon application to, and approval by, the District. [40 CFR 60.502(e)(6]

xxii. The owner or operator shall act to assure that loadings of gasoline tank trucks at the affected facility are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system. [40 CFR 60.502(f)]

xxiii. The owner or operator shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the affected facility. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible emission reminder signs at the affected loading racks. [40 CFR 60.502(g)]

xxiv. 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)]

xxv. 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)]

b. **HAP**

i. See Plant-Wide Specific Conditions S1.b.

ii. See Specific Condition S1.a.iii.

For Regulation 40 CFR 63 Subpart R:

iii. The owner or operator shall document and record to the Administrator's satisfaction that the result, E_T (emissions screening factor), is less than 1, and complies with requirements in the Applicability section of 40 CFR 63.420(c), 63.420(d), 63.420(e), and 63.420(f) (Subpart R).[22] [40 CFR 63.420(a)(1)]

The following equation and parameters are used to obtain E_T:

$$E_T = CF\ [0.59(T_F)(1 - CE) + 0.17(T_E) + 0.08(T_{ES}) + 0.038(T_I) + 8.5 \times 10^{-6}(C) + KQ] + 0.04(OE)$$

where:

E_T = emissions screening factor for bulk gasoline terminals;
CF = 0.161 for terminals that do not handle any reformulated or oxygenated gasoline containing 7.6 percent by volume or greater MTBE, or
CF = 1.0 for terminals that do handle reformulated or oxygenated gasoline containing 7.6 percent by volume or greater MTBE;
T_F = total number of fixed-roof gasoline storage vessels without an internal floating roof;
CE = control efficiency limitation on potential to emit for the vapor processing system used to control emissions from fixed-roof gasoline storage vessels [value should be added in decimal from (percent divided by 100)];
T_E = total number of external floating roof gasoline storage vessels with only primary seals;
T_{ES} = total number of external floating roof gasoline storage vessels with primary and secondary seals;
T_I = total number of fixed-roof gasoline storage vessels with an internal floating roof;
C = number of valves, pumps, connectors, loading arm valves, and open-ended lines in gasoline service;
Q = gasoline throughput limitation on potential to emit or gasoline throughput limit in compliance with 40 CFR 63.420(c), (d), and (f) of Subpart R (liters/day);
K = 4.52×10^{-6} for bulk gasoline terminals with uncontrolled loading racks (no vapor collection and processing systems), OR
K = $(4.5 \times 10^{-9})(EF + L)$ for bulk gasoline terminals with controlled loading racks (loading racks that have vapor collection and processing systems installed on the emission stream);

[22] The terminal is not subject to the control requirements pursuant to 63.420(a)(1) of Subpart R. The company has documented that the result of the equation in 63.420(a)(1) of Subpart R is less than 1. The latest results received on January 24, 2014 reported an E_T value of 0.316. The company is required to submit an annual report of the results of the E_T value.

EF = emission rate limitation on potential to emit for the gasoline cargo tank loading rack vapor processor outlet emissions (mg of total organic compounds per liter of gasoline loaded);

L = 13 mg/l for gasoline cargo tanks meeting the requirement to satisfy the test criteria for a vapor-tight gasoline tank truck in 40 CFR 60.501 [Subpart XX], or

L = 304 mg/l for gasoline cargo tanks not meeting the requirement to satisfy the test criteria for a vapor-tight gasoline tank truck in 40 CFR 60.501 [Subpart XX].

OE = other HAP emissions screening factor for bulk gasoline terminals or pipeline breakout stations (tons per year). OE equals the total HAP from other emission sources not specified in parameters in the equations for E_T or E_P. If the value of 0.04(OE) is greater than 5 percent of either E_T or E_P, then paragraphs (a)(1) and (b)(1) of 40 CFR 63.420 [Subpart R] shall not be used to determine applicability;

iv. A facility for which the results, E_T, of the calculation in the Applicability section of 40 CFR 63.420(a)(1) has been documented and is less than 1.0 but greater than or equal to 0.50, is exempt from the requirements of this subpart, except that the owner or operator shall: [40 CFR 63.420(c)]

1) Operate the facility such that none of the facility parameters used to calculate the results in the Applicability section of 40 CFR 63.420(a)(1), and approved by the Administrator, is exceeded in any rolling 30-day period; and [40 CFR 63.420(c)(1)]

2) Maintain records and provide reports in accordance with the provisions of the Reporting and Recordkeeping section in 40 CFR 63.428(i) (Subpart R). [40 CFR 63.420(c)(2)]

v. A facility for which the results, E_T, of the calculation in the Applicability section of 40 CFR 63.420(a)(1) has been documented and is less than 0.50, is exempt from the requirements of this subpart, except that the owner or operator shall: [40 CFR 63.420(d)]

1) Operate the facility such that none of the facility parameters used to calculate the results in the Applicability section of 40 CFR 63.420(a)(1) is exceeded in any rolling 30-day period; and [40 CFR 63.420(d)(1)]

2) Maintain records and provide reports in accordance with the provisions of the Reporting and Recordkeeping section in 40 CFR 63.428(j) (Subpart R). [40 CFR 63.420(d)(2)]

vi. The provisions in the Applicability section of 40 CFR 63.420(a)(1) shall not be used to determine applicability to bulk gasoline terminals that are either: [40 CFR 63.420(e)]

1) Located within a contiguous area and under common control with another bulk gasoline terminal, or [40 CFR 63.420(e)(1)]

2) Located within a contiguous area and under common control with other sources not specified in the Applicability section of 40 CFR 63.420(a)(1), that emit or have the potential to emit a hazardous air pollutant. [40 CFR 63.420(e)(2)]

c. **TAC**

i. See Plant-Wide Specific Condition S1.c.[23] [Regulations 5.01 and 5.21]

ii. See Specific Condition S1.a.ii.

S2. **Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1-2)**

Records shall be readily retrievable and shall be maintained for five (5) years prior to disposal unless otherwise specified in the permit. 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 perform semi-annual maintenance checks on the vapor recovery unit (VRU) and keep records of the results. The checks include, but are not limited to, an inspection of the VRU's valves, flanges, pumps, seals, gauges, fluid levels, piping, and associated loading rack components to check for leaks, corrosion, or any equipment defects. [Regulation 2.16, section 4.1.9.1-2, 40 CFR 60.502(j), Regulation 1.05 Compliance Plan, revised December 2014]

iii. When the terminal is staffed, the owner or operator shall complete the daily checklist form of the VRU's key operation indicators. The checklist includes, but is not limited to, maximum vacuum pulled during the regeneration cycle and the gasoline supply temperature. Daily and weekly inspections shall be performed using the checklist form to record the results, including any operation indicator deviations and corrections. [Regulation 2.16, section 4.1.9.1-2, 40 CFR 60.505(e)(1), Regulation 1.05 Compliance Plan, revised December 2014]

[23] The District received an updated environmental acceptability (EA) demonstration on April 03, 2012 that provided TAC emissions for the company's truck loading rack operation. The information in the report demonstrated that the controlled potential emissions from the truck loading rack operation can be classified as de minimis.

iv. For each portable vapor combustion unit (PVCU), the owner or operator shall monitor the presence of a flame at least once per batch for each day the flare is in operation. [Regulation 2.16, section 4.1.9.1-2]

v. The owner or operator shall maintain records that identify all periods when the vapor recovery unit was offline and the emissions from the terminal loading rack were being controlled by a portable vapor combustion unit (enclosed or open flare). The records shall include the date, duration of time (including the start and stop time) that the emissions were being controlled by a flare, the product being loaded, identification of which flare was controlling the emissions from the loading rack. [Regulation 2.16, section 4.1.9.1-2]

vi. 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 2.16, section 4.1.9.1-2, Regulation 1.05 Compliance Plan, revised December 2014]

vii. The owner or operator shall monthly maintain records, including calculations, of their calendar month and consecutive 12-month, emissions of each product type loaded through the terminal loading rack. [Regulation 2.16, section 4.1.9.1-2]

For Regulation 7.20:

viii. The test procedure as defined in "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems" (OAQPS 1.2-119, EPA) Appendix B or an equivalent procedure approved by the District, shall be used to determine compliance with the standard prescribed in Regulation 7.20, Section 3.11 during inspections conducted pursuant to KRS 77.165 or KRS 224.10-100(10). [Regulation 7.20, section 5.2]

For Regulation 7.22:

ix. There are no routine monitoring and record keeping requirements for this pollutant.

For Regulation 40 CFR 60 Subpart XX:

x. 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)]

xi. 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)]

xii. 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).

xiii. A record of each monthly leak inspection required under the Standard for VOC in 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.

xiv. The terminal owner or operator shall keep documentation of all notifications required under the Standard for VOC in 40 CFR 60.502(e)(4) on file at the terminal for at least 2 years. [40 CFR 60.505(d)]

xv. As an alternative to keeping records at the terminal of each gasoline cargo tank test result as required under the Reporting and Record Keeping sections of 40 CFR 60.505 (a), (c), and (d), an owner or operator may comply with the requirements in either paragraph (e)(1) or (2) of this section. [40 CFR 60.505(e)]

1) An electronic copy of each record is instantly available at the terminal. [40 CFR 60.505(e)(1)]

(a) The copy of each record in paragraph (e)(1) of this section is an exact duplicate image of the original paper record with certifying signatures. [40 CFR 60.505(e)(1)(i)]

(b) The permitting authority is notified in writing that each terminal using this alternative is in compliance with paragraph (e)(1) of this section. [40 CFR 60.505(e)(1)(ii)]

2) For facilities that utilize a terminal automation system to prevent gasoline cargo tanks that do not have valid cargo tank vapor tightness documentation from loading (*e.g.*, via a card lock-out system), a copy of the documentation is made available (*e.g.*, via facsimile) for inspection by permitting authority representatives during the course of a site visit, or within a mutually agreeable time frame. [40 CFR 60.505(e)(2)]

(a) The copy of each record in paragraph (e)(2) of this section is an exact duplicate image of the original paper record with certifying signatures. [40 CFR 60.505(e)(2)(i)]

(b) The permitting authority is notified in writing that each terminal using this alternative is in compliance with paragraph (e)(2) of this section. [40 CFR 60.505(e)(2)(ii)]

b. **HAP**

i. See Plant-Wide Specific Condition S2.b.

ii. See Specific Condition S2.a.vi. and vii.

For Regulation 40 CFR 63 Subpart R:

iii. See Specific Condition S1.b.iii. through vi.

iv. The owner or operator of a bulk gasoline terminal subject to the provisions of any paragraphs in 40 CFR 63.420(e) including, but not limited to, the parameters and assumptions used in the applicable equation in 40 CFR 63.420(a)(1), shall demonstrate compliance with those paragraphs. [40 CFR 63.420(f)]

v. Each owner or operator of a facility meeting the criteria in the Applicability section of 40 CFR 63.420(c) shall maintain records to document that the facility parameters established under the Applicability section of 40 CFR 63.420(c) have not been exceeded. (Refer to the equation (See Specific Condition S1.b.iii.) and the explanation of parameters under 40 CFR 63.420(a)(1).) [40 CFR 63.428(i)(2)]

vi. Each owner or operator of a facility meeting the criteria in the Applicability section of 40 CFR 63.420(d) shall maintain a record of the calculations in the Applicability section of 40 CFR 63.420(a)(1), including methods, procedures, and assumptions supporting the calculations for determining criteria in 40 CFR 63.420(d). (Refer to the equation and the explanation (See Specific Condition S1.b.iii.) of parameters under 40 CFR 63.420(a)(1)) [40 CFR 63.428(j)(2)]

c. **TAC**

i. See Plant-Wide Specific Condition S2.c.

ii. See Specific Condition S2.a.v.

S3. **Reporting (Regulation 2.16, section 4.1.9.3)**

a. **VOC**

i. See Plant-Wide Specific Conditions S3.a.

ii. The owner or operator shall identify all periods when both the vapor recovery unit (VRU) and the portable vapor combustion unit (PVCU) were offline when loading gasoline in the terminal loading rack--the emissions were uncontrolled. The report shall include the date, the total number of hours the emissions were uncontrolled, and the cause or reason no control device was used during the truck loading rack operation. If a control device was used during the reporting period, then the owner or operator shall report a negative declaration. [Regulation 2.16, section 4.1.9.3]

iii. The owner or operator shall identify and report all periods when the owner or operator deviates from the VRU operating parameters: [Regulation 2.16, section 4.1.9.3, Regulation 1.05 Compliance Plan, revised December 2014]

1) Emission Unit ID number

2) Date of occurrence;

3) Duration of occurrence (including start time and stop time);

4) The parameter that deviated;

5) Summary information on the cause or reason for each occurrence;

6) Corrective action taken to minimize the extent and duration of each occurrence; and

7) Measures implemented to prevent reoccurrence of the situation that resulted.

8) If there were no deviations during the reporting period, the annual compliance report must include a statement that there were no periods of deviation of operating parameters during the reporting period.

iv. The owner or operator shall report the total monthly and consecutive 12-month throughput, in gallons, and emissions of each product type loaded through the terminal loading rack during each calendar month in the reporting period. [Regulation 2.16, section 4.1.9.3]

For Regulation 7.20:

v. There are no routine reporting requirements for this equipment.

For Regulation 7.22:

vi. The owner or operator shall identify all periods when the VOM (Volatile Organic Material) was not loaded according to the requirements found in District Regulation 7.22, section 3.1 or 3.2. The report shall include: [Regulation 2.16, section 4.1.9.3]

1) Emission Unit ID number

2) Date of occurrence;

3) Duration of occurrence (including start time and stop time);

4) The total VOC emissions during the occurrence;

5) Summary information on the cause or reason for each occurrence;

6) Corrective action taken to minimize the extent and duration of each occurrence; and

7) Measures implemented to prevent reoccurrence of the situation that resulted.

8) If there were no occurrences where the loading requirements were not met during the reporting period, the annual compliance report

must include a statement that there were no periods of deviation from the loading requirements of District Regulation 7.22, sections 3.1 and 3.2 during the reporting period.

For Regulation 40 CFR 60 Subpart XX:

vii. There are no routine reporting requirements for this equipment.

b. **HAP**

i. See Plant-Wide Specific Conditions S3.b.

ii. See Specific Conditions S3.a.iv. and v.

For Regulation 40 CFR 63 Subpart R:

iii. Each owner or operator of a facility meeting the criteria in the Applicability section of 40 CFR 63.420(c) (Subpart R) shall perform the requirements of this paragraph (i), all of which will be available for public inspection: [40 CFR 63.428(i)]

1) Report annually to the Administrator that the facility parameters established under the Applicability section of 40 CFR 63.420(c) (Subpart R) have not been exceeded. The owner or operator shall submit the report on or before January 30 of each calendar year. [40 CFR 63.428(i)(3), Regulation 2.16, section 4.3.1]

2) At any time following the notification required under Reporting and Recordkeeping section in 40 CFR 63.428(i)(1) (Subpart R) of this section and approval by the Administrator of the facility parameters, and prior to any of the parameters being exceeded, the owner or operator may submit a report to request modification of any facility parameter to the Administrator for approval. Each such request shall document any expected HAP emission change resulting from the change in parameter. [40 CFR 63.428(i)(4)]

iv. Each owner or operator of a facility meeting the criteria in the Applicability section of 40 CFR 63.420(d) (Subpart R) shall perform the requirements of this paragraph (j), all of which will be available for public inspection: [40 CFR 63.428(j)]

1) At any time following the notification required under the Reporting and Recordkeeping section in 40 CFR 63.428(j)(1) (Subpart R), and prior to any of the parameters being exceeded, the owner or operator may notify the Administrator of modifications to the facility parameters. Each such notification shall document any expected HAP emission change resulting from the change in parameter. [40 CFR 63.428(j)(3)]

c. **TAC**

i. See Plant-Wide Specific Condition S3.c.

ii. See Specific Condition S3.a.ii.

S4. **Testing (Regulation 2.16, section 4.3.1)**

a. **VOC**

i. The owner or operator shall use the most recent District accepted performance test results to demonstrate compliance with the emission limits and in the annual emission inventory reporting.[24] [Regulation 2.16, section 4.3.1]

ii. If additional performance testing is to be performed, 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. At the end of the permit is a Protocol Checklist for Performance Test, which provides the information to be submitted in the protocol. [Regulation 2.16, section 4.3.1]

iii. The owner or operator shall provide the District at least 10 days prior notice of any compliance test to afford the District the opportunity to have an observer present. [Regulation 1.04, Section 2.9]

iv. The owner or operator shall furnish the District with a written report of the results of the compliance test(s) within 60 days following the actual date of completion of the compliance test(s).) [Regulation 2.16, section 4.3.1]

For Regulation 7.20:

v. There are no routine testing requirements for this pollutant.

For Regulation 7.22:

vi. There are no routine testing requirements for this pollutant.

For Regulation 40 CFR 60 Subpart XX:

[24] MPLX Terminals, LLC—Algonquin Terminal conducted a performance test on June 04, 2015 to determine the VOC emissions from the loading of gasoline into tanker trucks. The VOC emission rate was 0.35 mg VOC/liter of gasoline loaded. Previously, MPLX Terminals conducted compliance testing on January 14, 2010.

vii. The owner or operator shall conduct a performance test for the truck loading rack or at such other times specified by this part, and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s). [40 CFR 60.8(a)]

viii. Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act. [40 CFR 60.8(b)]

ix. 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)]

x. Immediately before the performance test required to determine compliance with the Standard for VOC in 40 CFR 60.502(b) 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. [40 CFR 60.503(b)]

xi. 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)]

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

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) The following methods shall be used to determine the volume (V_{esi}) air-vapor mixture exhausted at each interval: [40 CFR 60.503(c)(5)]

(a) Method 2B shall be used for combustion vapor processing systems. [40 CFR 60.503(c)(5)(i)]

(b) Method 2A shall be used for all other vapor processing systems. [40 CFR 60.503(c)(5)(ii)]

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)]

xii. 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)]

xiii. The performance test requirements of paragraph (c) of this section do not apply to flares defined in 40 CFR 60.501 and meeting the requirements in 40 CFR 60.18(b) through (f) of the General Provisions. The owner or operator shall demonstrate that the flare and associated vapor collection system is in compliance with the requirements in 40 CFR 60.18(b) through (f) of the General Provisions and 40 CFR 60.503(a), (b), and (d) of the Testing section of Subpart XX. [40 CFR 60.503(e)]

b. **HAP**

See Plant-Wide Specific Conditions S4.b.

For Regulation 40 CFR 63 Subpart R:

There are no routine testing requirements for this pollutant.

c. **TAC**

There are no routine testing requirements for this pollutant.

Alternative Operating Scenario

The owner or operator shall be allowed to utilize the portable vapor combustion unit (PVCU, or enclosed or open flare) when the vapor recovery unit (VRU) is offline. Loading of gasoline is not allowed unless the emissions are being controlled by the VRU or the portable vapor combustion unit. The facility is also authorized to continue loading diesel/kerosene/jet fuel—these products are stored in storage tanks that are listed as "IA" under the Storage Tank Emission Unit, U1 and U2—during an emergency episode, such as an ice storm or tornado, when the VRU, portable VCU, or flare is not operating. The facility shall continue to follow the requirements for the flare and VRU listed under the Monitoring and Record Keeping, and Reporting sections of this Emission Unit. The facility shall continue to monitor loading rates and calculate emissions to ensure compliance is maintained.

Emission Unit U4: Barge Loading

U4 Unit Description

One (1) barge loading operation used to transfer petroleum products from barges into storage tanks, as well as load various finished petroleum products from the bulk terminal storage tanks onto barges. The loading of gasoline and ethanol into barges is controlled by the VCU.

U4 Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
1.04	Performance Tests	1 through 3
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	1 through 5
40 CFR 63 Subpart A	General Provisions	1 through 16
40 CFR 63 Subpart Y	National Emission Standards for Marine Tank Vessel Loading Operations	560 through 562 (a, b, & e), 563 through 568

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
5.00	Definitions	1 through 2
5.01	General Provisions	1 through 2
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants	1, 2, 4.1, 4.22
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 7
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

U4 Equipment

Emission Point ID	Description Make/Model	Maximum Capacity	Control Device (Control ID)	Stack ID	Installation Date
E2	One (1) barge loading operation	294,000 gal/hr	C2	S2	2000

U4 Controls

Control ID	Description	Make/Model	Pollutant Controlled	Installation Date
C2	One (1) vapor combustion unit (VCU (thermal oxidizer)) used for collecting and controlling ethanol and gasoline vapors from the bulk terminal barge loading operations	John Zink Model VC921630	VOC	2000

U4 Specific Conditions

S1. **Standards (Regulation 2.16, section 4.1.1)**

a. **VOC**

i. See Plant-Wide Specific Conditions S1.a.

ii. The emissions of VOC shall not exceed 10 milligrams per liter of gasoline loaded[25] in order to avoid PSD requirements. [Regulation 2.16, section 4.1.1, Regulation 2.05, Regulation 7.25, sections 2.1 and 3.1, Construction Permit 160-99-C]

iii. The emissions of VOC shall not exceed 37.85 tons during any 12-month period in order to avoid PSD requirements. [Regulation 2.05]

iv. The owner or operator shall control the emissions from the barge loading operation with a vapor combustion unit (enclosed flare) during all periods of barge loading gasoline.[26] [Regulation 2.16, section 4.1.1, Regulation 7.25, sections 2.1 and 3.1]

v. The owner or operator shall utilize a vapor combustion unit (enclosed flare) as a Best Available Control Technology (BACT) level of emission control.[27]. [Regulation 7.25, sections 2.1 and 3.1]

vi. The owner or operator shall not allow or cause the throughput of the following product types to exceed the limits during any consecutive 12-month period for the barge loading operation: [Regulation 2.16, section 4.1.1, Regulation 1.05 Compliance Plan, revised December 2014]

Limit (gal/12-month period)	**Product**
400,000,000	Gasoline, Ethanol, and Naphtha combined
500,000,000	Fuel Oil

[25] MPLX Terminals, LLC—Algonquin Terminal conducted compliance testing on June 02-03, 2015. From the three test runs performed during the barge loading operation of gasoline, the overall control efficiency was 99.97% and the associated average concentration was 1.75 mg/L. From the three test runs performed during the barge loading operation of ethanol, the overall control efficiency was 99.95% and the associated average concentration was 1.34 mg/L. MPLX previously conducted a performance test on January 12-13, 2010.

[26] The barge loading operation at MPLX Terminals, LLC—Algonquin Terminal automatically shuts down if the control device is not operating. MPLX Terminals, LLC—Algonquin Terminal has no bypass line in place for the vapor combustion unit at the barge loading operation. If there is an upset or malfunction, the loading and control device automatically shuts down.

[27] The District has determined based on the performance test results, the vapor combustion unit meets BACT level of VOC control for the barge loading operation.

Limit (gal/12-month period)	Product
30,000,000	Gas/Oil (MPC Catalytic Cycle Oil)

b. **HAP**

i. See Plant-Wide Specific Conditions S1.b.i. and ii.

ii. See Specific Condition S1.a.iv.

iii. *Vapor collection system of the terminal*. The owner or operator of a new source with emissions less than 10 and 25 tons shall equip each terminal with a vapor collection system that is designed to collect HAP vapors displaced from marine tank vessels during marine tank vessel loading operations and to prevent HAP vapors collected at one loading berth from passing through another loading berth to the atmosphere, except for those commodities exempted under the applicability section of 40 CFR 63.560(d). [40 CFR 63.562(b)(1)(i)]

iv. *Ship-to-shore compatibility.* The owner or operator of a new source with emissions less than 10 and 25 tons shall limit marine tank vessel loading operations to those vessels that are equipped with vapor collection equipment that is compatible with the terminal's vapor collection system, except for those commodities exempted under applicability section of 40 CFR 63.560(d). [40 CFR 63.562(b)(1)(ii)]

v. *Vapor tightness of marine vessels.* The owner or operator of a new source with emissions less than 10 and 25 tons shall limit marine tank vessel loading operations to those vessels that are vapor tight and to those vessels that are connected to the vapor collection system, except for those commodities exempted under applicability section of 40 CFR 63.560(d). [40 CFR 63.562(b)(1)(iii)]

vi. *MACT standards for new sources.* The owner or operator of a new source with emissions less than 10 and 25 tons, except offshore loading terminals and the VMT source, shall reduce HAP emissions from marine tank vessel loading operations by 98 weight-percent, as determined using the test methods and procedures in 40 CFR 63.565(d) and (l).[28] [40 CFR 63.562(b)(3)]

[28] MPLX Terminals, LLC—Algonquin Terminal conducted compliance testing on June 02-03, 2015. From the three test runs performed during the barge loading operation of gasoline, the overall control efficiency was 99.97% and the associated average concentration was 1.75 mg/L. From the three test runs performed during the barge loading operation of ethanol, the overall control efficiency was 99.95% and the associated average concentration was 1.34 mg/L. MPLX Terminals previously conducted a performance test on January 12-13, 2010.

vii. Operation and maintenance requirements for air pollution control equipment and monitoring equipment for affected sources. At all times, including periods of startup, shutdown, and malfunction, owners or operators of affected sources shall operate and maintain a source, including associated air pollution control equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the District which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.562(e)]

1) The District will determine compliance with design, equipment, work practice, or operational emission standards by evaluating an owner or operator's conformance with operation and maintenance requirements. [40 CFR 63.562(e)(1)]

2) The owner or operator of an affected source shall develop and implement a written operation and maintenance plan that describes in detail a program of corrective action for varying (i.e., exceeding baseline parameters) air pollution control equipment and monitoring equipment, based on monitoring requirements in 40 CFR 63.564, used to comply with these emissions standards. The plan shall also identify all routine or otherwise predictable continuous monitoring system (thermocouples, pressure transducers, continuous emissions monitors (CEMS), etc.) variances. [40 CFR 63.562(e)(2)]

(a) The plan shall specify procedures (preventive maintenance) to be followed to ensure that pollution control equipment and monitoring equipment functions properly and variances of the control equipment and monitoring equipment are minimal. [40 CFR 63.562(e)(2)(i)]

(b) The plan shall identify all operating parameters to be monitored and recorded for the air pollution control device as indicators of proper operation and shall establish the frequency at which the parameters will be monitored (see the monitoring requirements in 40 CFR 63.564). 40 CFR 63.562(e)(2)(ii)

(c) Owners or operators of affected sources shall incorporate a standardized inspection schedule for each component of the control device used to comply with the emissions standard in 40 CFR 63.562(b). To satisfy the requirements of this paragraph, the owner or operator may use the inspection

schedule recommended by the vendor of the control system or any other technical publication regarding the operation of the control system. [40 CFR 63.562(e)(2)(iii)]

(d) Owners or operators shall develop and implement a continuous monitoring system (CMS) quality control program. The owner or operator shall develop and submit to the District for approval upon request a site-specific performance evaluation test plan for the CMS performance evaluation required in 40 CFR 63.8(e) of Subpart A (General Provisions). Each quality control program shall include, at a minimum, a written protocol that describes procedures for initial and any subsequent calibration of the CMS; determination and adjustment of the calibration drift of the CMS; preventive maintenance of the CMS, including spare parts inventory; data recording, calculations, and reporting; and accuracy audit procedures, including sampling and analysis methods. The owner or operation shall maintain records of the procedures that are part of the quality control program developed and implemented for CMS. [40 CFR 63.562(e)(2)(iv)]

3) Based on the results of the determination made under the standards of 40 CFR 63.562(e)(2), the District may require that an owner or operator of an affected source make changes to the operation and maintenance plan for that source. Revisions may be required if the plan: [40 CFR 63.562(e)(3)]

(a) Does not address a variance of the air pollution control equipment or monitoring equipment that has occurred that increases emissions; [40 CFR 63.562(e)(3)(i)]

(b) Fails to provide for operation during a variance of the air pollution control equipment or the monitoring equipment in a manner consistent with safety and good air pollution control practices; or [40 CFR 63.562(e)(3)(ii)]

(c) Does not provide adequate procedures for correcting a variance of the air pollution control equipment or monitoring equipment as soon as reasonable. [40 CFR 63.562(e)(3)(iii)]

4) If the operation and maintenance plan fails to address or inadequately addresses a variance event at the time the plan was initially developed, the owner or operator shall revise the operation and maintenance plan within 45 working days after such an event occurs. The revised plan shall include procedures for operating and

maintaining the air pollution control equipment or monitoring equipment during similar variance events and a program for corrective action for such events. [40 CFR 63.562(e)(4)]

5) The operation and maintenance plan shall be developed by the source's compliance date. The owner or operator shall keep the written operation and maintenance plan on record to be made available for inspection, upon request, by the District for the life of the source. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection upon request by the District for a period of 5 years after each revision to the plan. [40 CFR 63.562(e)(5)]

6) To satisfy the requirements of the operation and maintenance plan, the owner or operator may use the source's standard operating procedures (SOP) manual, an Occupational Safety and Health Administration (OSHA) plan, or other existing plans provided the alternative plans meet the requirements of this section and are made available for inspection when requested by the District. [40 CFR 63.562(e)(6)]

c. **TAC**

i. See Plant-Wide Specific Condition S1.c.[29] [Regulations 5.01 and 5.21]

ii. The owner or operator shall not allow benzene emissions to exceed 440.3 lb/yr while loading gasoline during barge loading. [Regulation 5.21]

iii. The owner or operator shall control the emissions from the barge loading operation with a vapor combustion unit (enclosed flare) during all periods of barge loading gasoline. [Regulation 2.16, section 4.1.1]

S2. **Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1-2)**

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

a. **VOC**

i. See Plant-Wide Specific Conditions S2.a.

[29] The District received an environmental acceptability (EA) demonstration on April 03, 2012 that reported controlled benzene emissions for gasoline loading during the barge loading operation to be above de minimis levels. In order to demonstrate environmental acceptability, the source performed Tier 4 modeling, using Industrial Source Complex Short-Term (ISCST3) Version 3, with a controlled emission rate of 440.3 lb/yr and noted the highest risk to be 0.004, which demonstrates that the company is below the environmental acceptability goal (EAG) of 1.0 for individual processes defined under District Regulation 5.21.

ii. The owner or operator shall perform semi-annual maintenance checks on the vapor combustion unit (VCU) and keep records of the results. The checks include, but are not limited to, an inspection of the VCU's valves, flanges, pumps, seals, gauges, fluid levels, piping, and associated loading rack components to check for leaks, corrosion, or any equipment defects. [Regulation 2.16, section 4.1.9.1-2, 40 CFR 63.562(e), Regulation 1.05 Compliance Plan, revised December 2014]

iii. The owner shall be perform daily inspections while the VCU is operating to ensure no defects occur. [Regulation 2.16, section 4.1.9.1-2, Regulation 1.05 Compliance Plan, revised December 2014]

iv. The owner or operator shall monthly maintain monthly records that show the quantity, in gallons, of each product type loaded through the barge loading operation. [Regulation 2.16, section 4.1.9.1-2, Regulation 1.05 Compliance Plan, revised December 2014]

v. The owner or operator shall monthly maintain records, including calculations, of their calendar month and consecutive 12-month, emissions of each product type loaded through the barge loading operation. [Regulation 2.16, section 4.1.9.1-2]

b. **HAP**

i. See Plant-Wide Specific Conditions S2.b.i. and ii.

ii. See Specific Condition S2.a.ii. and iii.

iii. *Ship-to-shore compatibility of vapor collection systems.* Marine tank vessel loading operations must be performed only if the marine tank vessel's vapor collection equipment is compatible to the terminal's vapor collection system; marine tank vessel loading operations must be performed only when the marine tank vessel's vapor collection equipment is connected to the terminal's vapor collection system, as required in the standard of 40 CFR 63.562(b)(1)(ii). [40 CFR 63.563(a)(2)]

iv. *Vapor-tightness requirements of the marine vessel.* The owner or operator of an affected source shall use the procedures in 40 CFR 63.563 (a)(4)(i), (ii), or (iii) to ensure that marine tank vessels are vapor tight, as required in the standard of 40 CFR 63.562(b)(1)(iii).[30] [40 CFR 63.563(a)(4)]

1) *Pressure test documentation for determining vapor tightness of the marine vessel*. The owner or operator of a marine tank vessel, who loads commodities containing HAP at an affected source not determined to be exempt under the applicability section of 40 CFR 63.560(d), shall provide a copy of the vapor-tightness pressure test

[30] The Algonquin terminal typically uses the pressure test option in 40 CFR 63.563(a)(4)(i).

documentation described in 40 CFR 63.567(i) for each marine tank vessel prior to loading. The date of the test listed in the documentation must be within the preceding 12 months, and the test must be conducted in accordance with the procedures in 40 CFR 63.565(c)(1). Following the date on which the performance test is completed, the affected source must check vapor-tightness pressure test documentation for marine tank vessels loaded at positive pressure. [40 CFR 63.563(a)(4)(i)]

2) *Leak test documentation for determining vapor tightness of the marine vessel*. If no documentation of the vapor tightness pressure test as described in 40 CFR 63.563(a)(4)(i) is available, the owner or operator of a marine tank vessel, who loads commodities containing HAP at an affected source not determined to be exempt under the applicability section of 40 CFR 63.560(d), shall provide the leak test documentation described in 40 CFR 63.567(i) for each marine tank vessel prior to loading. The date of the test listed in the documentation must be within the preceding 12 months, and the test must be conducted in accordance with the procedures in 40 CFR 63.565(c)(2). If the marine tank vessel has failed its most recent vapor-tightness leak test at that terminal, the owner or operator of the non-vapor-tight marine tank vessel shall provide documentation that the leaks detected during the previous vapor-tightness test have been repaired and documented with a successful vapor-tightness leak test described in 40 CFR 63.565(c)(2) conducted during loading. If the owner or operator of the marine tank vessel can document that repair is technically infeasible without cleaning and gas freeing or dry-docking the vessel, the owner or operator of the affected source may load the marine tank vessel. Following the date on which the performance test is completed, an affected source must check the vapor-tightness leak test documentation for marine tank vessels loaded at positive pressure. [40 CFR 63.563(a)(4)(ii)]

3) *Leak test performed during loading using Method 21 for determining vapor tightness of the marine vessel*. If no documentation of vapor tightness as described in 40 CFR 63.563(a)(4)(i) or (ii) is available, the owner or operator of a marine tank vessel, who loads commodities containing HAP at an affected source not determined to be exempt under the applicability section of 40 CFR 63.560(d), shall perform a leak test of the marine tank vessel during marine tank vessel loading operation using the procedures described in 40 CFR 63.565(c)(2). [40CFR 63.563(a)(4)(iii)]

(a) If no leak is detected, the owner or operator of a marine tank vessel shall complete the documentation described in

40 CFR 63.567(i) prior to departure of the vessel. [40 CFR 63.563(a)(4)(iii)(A)]

(b) If a leak is detected, the owner or operator of the marine tank vessel shall document the vapor-tightness failure for the marine tank vessel prior to departure of the vessel. The leaking component shall be repaired prior to the next marine tank vessel loading operation at a controlled terminal unless the repair is technically infeasible without cleaning and gas freeing or dry-docking the vessel. If the owner or operator of the vessel provides documentation that repair of such equipment is technically infeasible without cleaning and gas freeing or dry-docking the vessel, the equipment responsible for the leak will be excluded from future Method 21 tests until repairs are effected. A copy of this documentation shall be maintained by the owner or operator of the affected source. Repair of the equipment responsible for the leak shall occur the next time the vessel is cleaned and gas freed or dry-docked. For repairs that are technically feasible without dry-docking the vessel, the owner or operator of the affected source shall not load the vessel again unless the marine tank vessel owner or operator can document that the equipment responsible for the leak has been repaired. [40 CFR 63.563(a)(4)(iii)(B)]

v. *Operation and maintenance inspections*. If the 3-hour or 3-cycle block average operating parameters in 40 CFR 63.563(b)(4) through (9), outside the acceptable operating ranges, are measured and recorded, i.e., variances of the pollution control device or monitoring equipment, the owner or operator of the affected source shall perform an unscheduled inspection of the control device and monitoring equipment and review of the parameter monitoring data. The owner or operator of the affected source shall perform an inspection and review when total parameter variance time for the control device is greater than 10 percent of the operating time for marine tank vessel loading operations on a 30-day, rolling-average basis. The inspection and review shall be conducted within 24 hours after passing the allowable variance time of 10 percent. The inspection checklist from the requirements of 40 CFR 63.562(e)(2)(iii) and the monitoring data from requirements in 40 CFR 63.562(e)(2)(ii) and 63.564 should be used to identify any maintenance problems that may be associated with the variance. The unscheduled inspection should encompass all components of the control device and monitoring equipment that can be inspected while in operation. If any maintenance problem is identified during the inspection, the owner or operator of the affected source must take corrective action (e.g., adjustments to operating controls, etc.) as soon as practicable. If no immediate maintenance

problems are identified from the inspection performed while the equipment is operating, a complete inspection in accordance with 40 CFR 63.562(e)(2) must be conducted prior to the next marine tank vessel loading operation and corrective action (e.g., replacement of defective parts) must be taken as soon as practicable for any maintenance problem identified during the complete inspection. [40 CFR 63.563(b)(3)]

vi. *Combustion device, except flare*. *Baseline temperature for required percent combustion efficiency*. The owner or operator shall operate the facility with the block average temperature as determined in the Monitoring Requirements of 40 CFR 63.564(e)(2) no more than 28 °C (50 °F) below the baseline temperature.[31] [40 CFR 63.563(b)(4)(ii)]

vii. *Emission estimation*. The owner or operator of a source subject to the standard of 40 CFR 63.562(b)(3) shall use the emission estimation procedures in 40 CFR 63.565(l) to calculate HAP emissions. [40 CFR 63.563(b)(10)]

viii. *Emission estimation procedures*. For sources with emissions less than 10 or 25 tons, the owner or operator shall calculate an annual estimate of HAP emissions, excluding commodities exempted by § 63.560(d), from marine tank vessel loading operations. Emission estimates and emission factors shall be based on test data, or if test data is not available, shall be based on measurement or estimating techniques generally accepted in industry practice for operating conditions at the source. [40 CFR 63.565(l)]

ix. *Leak detection and repair for vapor collection systems and control devices*. The following procedures are required for all sources subject to the standard of 40 CFR 63.562(b). [40 CFR 63.563(c)]

1) *Annual leak detection and repair for vapor collection systems and control devices*. The owner or operator of an affected source shall inspect and monitor all ductwork and piping and connections to vapor collection systems and control devices once each calendar year using Method 21. [40 CFR 63.563(c)(1)]

2) *Ongoing leak detection and repair for vapor collection systems and control devices*. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method, all

[31] To stay in compliance with 40 CFR 63.562(b)(3), MPLX Terminals, LLC—Algonquin Terminal has elected to establish a baseline temperature, which is an option for compliance required under 40 CFR 63.563(b)(4). 40 CFR 563(b)(4)(ii) required MPLX Terminals to establish a baseline temperature using the procedures described in 40 CFR 63.565(f). MPLX Terminals conducted compliance testing on June 02-03, 2015. From the test run for the barge loading operation of gasoline, the baseline temperature was 935 °F and the associated control efficiency was 99.97%. From the test run for the barge loading operation of ethanol, the baseline temperature was 793 °F and the associated control efficiency was 99.95%. Previously, MPLX Terminals conducted compliance testing on January 12-13, 2010.

ductwork and piping and connections to vapor collection systems and control devices shall be inspected to the extent necessary to positively identify the potential leak and any potential leaks shall be monitored within 5 days by Method 21. Each detection of a leak shall be recorded, and the leak shall be tagged until repaired. [40 CFR 63.563(c)(2)]

3) When a leak is detected, a first effort to repair the vapor collection system and control device shall be made within 15 days or prior to the next marine tank vessel loading operation, whichever is later. [40 CFR 63.563(c)(3)]

x. The owner or operator of an affected source shall comply with the monitoring requirements in 40 CFR 63.8 of the General Provisions (Subpart A) in accordance with the provisions for applicability of subpart A to Table 1 in 40 CFR 63.560 and the monitoring requirements in 40 CFR 63.564. [40 CFR 63.564(a)(1)]

xi. Each owner or operator of an affected source shall monitor the parameters specified in the monitoring requirements of 40 CFR 63.564. All monitoring equipment shall be installed such that representative measurements of emissions or process parameters from the source are obtained. For monitoring equipment purchased from a vendor, verification of the operational status of the monitoring equipment shall include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system. [40 CFR 63.564(a)(2)]

xii. Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift adjustments, all continuous parametric monitoring systems (CPMS) and CEMS shall be in continuous operation while marine tank vessel loading operations are occurring and shall meet minimum frequency of operation requirements. Sources monitoring by use of CEMS and CPMS shall complete a minimum of one cycle of operation (sampling, analyzing, and/or data recording) for each successive 15-minute period. [40 CFR 63.564(a)(3)]

xiii. The owner or operator of a CMS installed in accordance with these emissions standards shall comply with the performance specifications either in performance specification (PS) 8[32] in 40 CFR part 60, appendix B for CEMS or in the General Provisions of 40 CFR 63.7(c)(6) of subpart A for CPMS. [40 CFR 63.564(a)(4)]

[32] Performance Specification 8—Performance Specifications for Volatile Organic Compound Continuous Emission Monitoring Systems in Stationary Sources.

xiv. *Combustion devices, except flare*. For sources complying with 40 CFR 63.563(b)(4), use of a combustion device except a flare, the owner or operator shall comply with 40 CFR 63.564(e)(2) and 40 CFR 63.564(e)(4). [40 CFR 63.564(e)]

1) *Operating temperature determined during performance testing*. If the baseline temperature was established during the performance test, the data acquisition system shall record the temperature every 15 minutes and shall compute and record an average temperature each cycle (same time period or cycle of the performance test) and a 3- cycle block average every third cycle. [40 CFR 63.564(e)(2)]

2) *Temperature monitor*. The owner or operator shall install, calibrate, operate, and maintain a temperature monitor accurate to within ±5.6 °C (±10 °F) or within 1 percent of the baseline temperature, whichever is less stringent, to measure the temperature. The monitor shall be installed at the exhaust point of the combustion device but not within the combustion zone. The owner or operator shall verify the accuracy of the temperature monitor once each calendar year with a reference temperature monitor (traceable to National Institute of Standards and Technology (NIST) standards or an independent temperature measurement device dedicated for this purpose).[33] During accuracy checking, the probe of the reference device shall be at the same location as that of the temperature monitor being tested. [40 CFR 63.564(e)(4)]

xv. The owner or operator of an affected source shall fulfill all record keeping requirements in 40 CFR 63.10 of the General Provisions (Subpart A) in accordance with the provisions for applicability of subpart A to Table 1 in 40 CFR 63.560. [40 CFR 63.567(a)]

xvi. *Vapor collection system of the terminal*. Each owner or operator of an affected source shall maintain in an accessible location on site an engineering report describing in detail the vent system, or vapor collection system, used to vent each vent stream to a control device. This report shall include all valves and vent pipes that could vent the stream to the atmosphere, thereby bypassing the control device, and identify which valves are car-sealed opened and which valves are car-sealed closed.[34] [40 CFR 63.567(f)]

[33] MPLX Terminals, LLC—Algonquin Terminal performs semi-annual maintenance checks on the vapor combustion unit (VCU) and keeps records of the results. The temperature monitor is verified on the second of the two maintenance checks.

[34] There is no bypass line in place in the vapor collection system at the MPLX Terminals, LLC—Algonquin Terminal barge loading operation. If there is an upset or malfunction, the loading and control device automatically shuts down.

xvii. The owner or operator of an affected source shall keep the vapor-tightness documentation required under the compliance and performance testing of 40 CFR 63.563(a)(4) on file at the source in a permanent form available for inspection. [40 CFR 63.567(h)]

xviii. *Vapor tightness test documentation for marine tank vessels*. The owner or operator of an affected source shall maintain a documentation file for each marine tank vessel loaded at that source to reflect current test results as determined by the appropriate method in 40 CFR 63.565(c)(1) and (2). Updates to this documentation file shall be made at least once per year. The owner or operator shall include, as a minimum, the following information in this documentation: [40 CFR 63.567(i)]

1) Test title;

2) Marine vessel owner and address;

3) Marine vessel identification number;

4) Loading time, according to the compliance and performance testing of 40 CFR 63.563(a)(4)(ii) or (iii), if appropriate;

5) Testing location;

6) Date of test;

7) Tester name and signature;

8) Test results from 40 CFR 63.565(c)(1) or (2), as appropriate;

9) Documentation provided under the requirements of 40 CFR 63.563(a)(4)(ii) and (iii)(B) showing that the repair of leaking components attributed to a failure of a vapor-tightness test is technically infeasible without dry-docking the vessel; and

10) Documentation that a marine tank vessel failing a pressure test or leak test has been repaired.

xix. *Emission estimation reporting and record keeping procedures*. The owner or operator of each source complying with the emission limits specified in the standards of 40 CFR 63.562(b)(2), (3), and (4) shall comply with the following provisions: [40 CFR 63.567(j)]

1) Maintain records of all measurements, calculations, and other documentation used to identify commodities exempted under the applicability section of 40 CFR 63.560(d); [40 CFR 63.567(j)(1)]

2) Keep readily accessible records of the emission estimation calculations performed in the test methods and procedures of 40 CFR 63.565(l) for 5 years; and [40 CFR 63.567(j)(2)]

3) Owners or operators of marine tank vessel loading operations specified in the applicability section of 40 CFR 63.560(a)(3) shall retain records of the emissions estimates determined in the test methods and procedures of 40 CFR 65.565(l), as well as retain records of their actual throughputs by commodity, for 5 years. [40 CFR 63.567(j)(4)]

xx. *Leak detection and repair of vapor collection systems and control devices*. When each leak of the vapor collection system, or vapor collection system, and control device is detected and repaired as specified in the compliance and performance testing section of 40 CFR 63.563(c) the following information required shall be maintained for 5 years: [40 CFR 63.567(k)]

1) Date of inspection;

2) Findings (location, nature, and severity of each leak);

3) Leak determination method;

4) Corrective action (date each leak repaired, reasons for repair interval); and

5) Inspector name and signature.

c. **TAC**

See Plant-Wide Specific Condition S2.c.

S3. **Reporting (Regulation 2.16, section 4.1.9.3)**

a. **VOC**

i. See Plant-Wide Specific Conditions S3.a.

ii. The owner or operator shall report the total monthly and consecutive 12-month throughput, in gallons, and emissions of each product type loaded through the barge loading operation during each calendar month in the reporting period. [Regulation 2.16, section 4.1.9.3]

b. **HAP**

i. See Plant-Wide Specific Condition S3.b.i. and ii.

ii. See Specific Conditions S3.a.ii. and iii.

iii. The owner or operator shall fulfill all reporting requirements in 40 CFR 63.9 and 63.10 of the General Provisions (Subpart A) in accordance with the provisions for applicability of subpart A to Table 1 in 40 CFR 63.560 and fulfill all reporting and record keeping requirements in 40 CFR 63.657. These reports will be made to the District. [40 CFR 63.567(a)]

iv. *Emission estimation reporting and record keeping procedures.* The owner or operator shall submit an annual report of the source's HAP control efficiency calculated using the test methods and procedures specified in 40 CFR 63.565(l), based on the source's actual throughput. [40 CFR 63.567(j)(3)]

v. *Schedule for summary report and excess emissions and monitoring system performance reports*. Excess emissions and parameter monitoring exceedances are defined under 40 CFR 63.563(b). The owner or operator of a source subject to these emissions standards that is required to install a CMS shall submit an excess emissions and continuous monitoring system performance report and/or a summary report to the District once each year, except, when the source experiences excess emissions, the source shall comply with a semi-annual reporting format until a request to reduce reporting frequency under 40 CFR 63.567(e)(2) of this section is approved. [40 CFR 63.567(e)(1)]

vi. *Request to reduce frequency of excess emissions and continuous monitoring system performance reports*. An owner or operator who is required to submit excess emissions and continuous monitoring system performance and summary reports on a semi-annual basis may reduce the frequency of reporting to annual if the following conditions are met: [40 CFR 63.567(e)(2)]

1) For 1 full year the source’s excess emissions and continuous monitoring system performance reports continually demonstrate that the source is in compliance; and [40 CFR 63.567(e)(2)(i)]

2) The owner or operator continues to comply with all record keeping and monitoring requirements specified in this subpart and subpart A of this part. [40 CFR 63.567(e)(2)(ii)]

vii. The frequency of reporting of excess emissions and continuous monitoring system performance and summary reports required may be reduced only after the owner or operator notifies the District in writing of his or her intention to make such a change and the District does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the District may review information concerning the source's entire previous performance history during the 5-year record keeping prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with

operation maintenance requirements. Such information may be used by the District to make a judgment about the source's potential for noncompliance in the future. If the District will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the District to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted. [40 CFR 63.567(e)(3)]

viii. *Content and submittal dates for excess emissions and monitoring system performance reports*. All excess emissions and monitoring system performance reports and all summary reports, if required per 40 CFR 63.567(e)(5) and (6) of this section, shall be delivered or postmarked within 30 days following the end of each calendar year, or within 30 days following the end of each six month period, if appropriate. Written reports of excess emissions or exceedances of process or control system parameters shall include all information required in 40 CFR 63.10(c)(5) through (13) of the General Provisions (Subpart A) as applicable in Table 1 of 40 CFR 63.560 and information from any calibration tests in which the monitoring equipment is not in compliance with PS 8[35] or other methods used for accuracy testing of temperature, pressure, or flow monitoring devices. The written report shall also include the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances have occurred or monitoring equipment has not been inoperative, repaired, or adjusted, such information shall be stated in the report. This information will be kept for a minimum of 5 years and made readily available to the District or delegated State authority upon request. [40 CFR 63.567(e)(4)]

ix. If the total duration of excess emissions or control system parameter exceedances for the reporting period is less than 5 percent of the total operating time for the reporting period, and CMS downtime for the reporting period is less than 10 percent of the total operating time for the reporting period, only the summary report from 40 CFR 63.10(e)(3)(vi) of the General Provisions (Subpart A) shall be submitted, and the full excess emissions and continuous monitoring system performance report of 40 CFR 63.567 (e)(4) need not be submitted unless required by the District. [40 CFR 63.567(e)(5)]

x. If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is 5 percent or greater of the total operating time for the reporting period, or the total CMS downtime for the reporting period is 10 percent or greater of the total operating time for the reporting period, both the summary report from 40

[35] Performance Specification 8—Performance Specifications for Volatile Organic Compound Continuous Emission Monitoring Systems in Stationary Sources.

CFR 63.10(e)(3)(vi) of the General Provisions (Subpart A) and the excess emissions and continuous monitoring system performance report of 40 CFR 63.567 (e)(4) shall be submitted. [40 CFR 63.567(e)(6)]

xi. The owner or operator shall report the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded shall be stated in a semiannual report. 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 the operation and maintenance requirements 40 CFR 63.562(e), including actions taken to correct a malfunction. The report, to be certified by the owner or operator or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half. [40 CFR 63.567(m)]

c. **TAC**

i. See Plant-Wide Specific Condition S3.c.

ii. The owner or operator shall identify all periods when the vapor combustion unit (enclosed flare) is bypassed or not in operation during barge loading operation. The report shall include the following: [Regulation 2.16, section 4.1.9.3]

1) Emission Unit ID number;

2) The date and duration (including start and end date) during which the VRU and/or PVCU 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.

If no bypass occurred during the reporting period, the annual compliance report shall contain a declaration that there were no periods when the vapor combustion unit (enclosed flare) was bypassed or not in operation when there was barge loading operating during the reporting period.

S4. **Testing (Regulation 2.16, section 4.3.1)**

a. **VOC**

There are no routine testing requirements for this pollutant.

b. **HAP**

i. The owner or operator shall use the most recent District accepted performance test results to demonstrate compliance with the emission limits and in the annual emission inventory reporting.[36] [Regulation 2.16, section 4.3.1]

ii. If additional performance testing is to be performed, 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. At the end of the permit is a Protocol Checklist for Performance Test, which provides the information to be submitted in the protocol. [Regulation 2.16, section 4.3.1]

iii. The owner or operator shall provide the District at least 10 days prior notice of any compliance test to afford the District the opportunity to have an observer present. [Regulation 1.04, Section 2.9]

iv. The owner or operator shall furnish the District with a written report of the results of the compliance test within 60 days following the actual date of the compliance test. [Regulation 2.16, section 4.3.1]

v. The owner or operator of an affected source in the standards of 40 CFR 63.562 shall comply with the performance testing requirements in 40 CFR 63.7 of the General Provisions (Subpart A) in accordance with the provisions for applicability of Subpart A to Table 1 in 40 CFR 63.560 and the performance testing requirements in this section. [40 CFR 63.565(a)]

vi. *Vapor-tightness test procedures for the marine tank vessel*. When testing a vessel for vapor tightness to comply with the marine vessel vapor-tightness requirements of 40 CFR 63.563(a)(4)(i), the owner or operator of

[36] MPLX Terminals, LLC—Algonquin Terminal conducted compliance testing on June 02-03, 2015. From the three test runs performed during the barge loading operation of gasoline, the overall control efficiency was 99.97% and the associated average concentration was 1.75 mg/L. From the three test runs performed during the barge loading operation of ethanol, the overall control efficiency was 99.95% and the associated average concentration was 1.34 mg/L. From the performance test for the barge loading of gasoline, the baseline temperature was 935 °F and the associated control efficiency was 99.97%. From the performance test for the barge loading of ethanol, the baseline temperature was 793 °F and the associated control efficiency was 99.95%. Previously, MPLX Terminals conducted compliance testing on January 12-13, 2010.

a source shall use the methods in either 40 CFR 63.565(c)(1) or (2). [40 CFR 63.565(c)]

1) Pressure test for the marine tank vessel. [40 CFR 63.565(c)(1)]

(a) Each product tank shall be pressurized with dry air or inert gas to no more than the pressure of the lowest pressure relief valve setting. [40 CFR 63.565(c)(1)(i)]

(b) Once the pressure is obtained, the dry air or inert gas source shall be shut off. [40 CFR 63.565(c)(1)(ii)]

(c) At the end of one-half hour, the pressure in the product tank and piping shall be measured. The change in pressure shall be calculated using the following formula: [40 CFR 63.565(c)(1)(iii)]

$P = P_i – P_f$

Where:

P = change in pressure, inches of water.
P_i = pressure in tank when air/gas source is shut off, inches of water.
P_f = pressure in tank at the end of one-half hour after air/gas source is shut off, inches of water.

(d) The change in pressure, P, shall be compared to the pressure drop calculated using the following formula: [40 CFR 63.565(c)(1)(iv)]

$PM = 0.861\ P_{ia}\ L / V$

Where:

PM = maximum allowable pressure change, inches of water.
P_{ia} = pressure in tank when air/gas source is shut off, psia.
L = maximum permitted loading rate of vessel, barrels per hour.
V = total volume of product tank, barrels.

(e) If P < PM, the vessel is vapor tight. [40 CFR 63.565(c)(1)(v)]

(f) If P >PM, the vessel is not vapor tight and the source of the leak must be identified and repaired prior to retesting. [40 CFR 63.565(c)(1)(vi)]

2) *Leak test for the marine tank vessel*. Each owner or operator of a source complying with the leak test requirements of 40 CFR 63.563(a)(4)(ii) or (iii) shall use Method 21 as the vapor-tightness leak test for marine tank vessels. The test shall be conducted during the final 20 percent of loading of each product tank of the marine vessel, and it shall be applied to any potential sources of vapor leaks on the vessel. [40 CFR 63.565(c)(2)]

vii. Combustion (except flare) and recovery control device performance test procedures. [40 CFR 63.565(d)]

1) All testing equipment shall be prepared and installed as specified in the appropriate test methods. [40 CFR 63.565(d)(1)]

2) All testing shall be performed during the last 20 percent of loading of a tank or compartment. [40 CFR 63.565(d)(2)]

3) All emission testing intervals shall consist of each 5 minute period during the performance test. For each interval, the following shall be performed: [40 CFR 63.565(d)(3)]

(a) *Readings*. The reading from each measurement instrument shall be recorded. [40 CFR 63.565(d)(3)(i)]

(b) *Sampling Sites*. Method 1 or 1A of Appendix A of 40 CFR Part 60, as appropriate, shall be used for selection of sampling sites. Sampling sites shall be located at the inlet and outlet of the combustion device or recovery device except for owners or operators complying with the 1,000 ppmv VOC emissions limit for gasoline vapors under 40 CFR 63.563(b)(6) or (7), where the sampling site shall be located at the outlet of the recovery device. [40 CFR 63.565(d)(3)(ii)]

(c) *Volume exhausted*. The volume exhausted shall be determined using Method 2, 2A, 2C, or 2D of Appendix A of 40 CFR Part 60, as appropriate. [40 CFR 63.565(d)(3)(iii)]

4) *Combustion devices, except flares*. The average VOC concentration in the vent upstream and downstream of the control device shall be determined using Method 25 of appendix A of 40 CFR Part 60 for combustion devices, except flares. The average VOC concentration shall correspond to the volume measurement by taking into account the sampling system response time. [40 CFR 63.565(d)(4)]

5) The VOC mass at the inlet and outlet of the combustion device during each testing interval shall be calculated as follows: [40 CFR 63.565(d)(6)]

$M_j = FKV_sC_{VOC}$

Where:

M_j = mass of VOC at the inlet and outlet of the combustion or recovery device during testing interval j, kilograms (kg).

F = conversion factor, (cubic meters VOC/cubic meters air)(1/ppmv) (m^3 VOC/m^3 air)(1/ppmv).

K = density, kilograms per cubic meter (kg/m^3 VOC), standard conditions, 20 °C and 760 mm Hg.

V_s = volume of air-vapor mixture at the inlet and outlet of the combustion or recovery device, cubic meters (m^3) at standard conditions, 20 °C and 760 mm Hg.

K = density, kilograms per cubic meter (kg/m^3 VOC), standard conditions, 20 °C and 760 mm Hg.

C_{VOC} = VOC concentration (as measured) at the inlet and outlet of the combustion or recovery device, ppmv, dry basis.

s = standard conditions, 20 °C and 760 mm Hg.

6) The VOC mass emission rates at the inlet and outlet of the recovery or combustion device shall be calculated as follows: [40 CFR 63.565(d)(7)]

$$E_i = \frac{\sum_{j=1}^{n} M_{ij}}{T}$$

$$E_o = \frac{\sum_{j=1}^{n} M_{oj}}{T}$$

Where:

E_i, E_o = mass flow rate of VOC at the inlet (i) and outlet (o) of the recovery or combustion device, kilogram per hour (kg/hr).

M_{ij}, M_{oj} = mass of VOC at the inlet (i) or outlet (o) during testing interval j, kg.

T = Total time of all testing intervals, hour.

n = number of testing intervals.

7) Where Method 25, 25A, or 25B is used to measure the percent reduction in VOC, the percent reduction across the combustion or recovery device shall be calculated as follows: [40 CFR 63.565(d)(8)]

$$R = \frac{E_i - E_o}{E_i}(100\%)$$

Where:

R = control efficiency of control device, percent

E_i = mass flow rate of VOC at the inlet to the combustion or recovery device, as calculated under 40 CFR 63.565(d)(7), kg/hr.

E_o = mass flow rate of VOC at the outlet of the combustion or recovery device, as calculated under 40 CFR 63.565(d)(7), kg/hr.

8) The owner or operator shall repeat the test methods and procedures in 40 CFR 63.565(d)(1) through (d)(8) three (3) times. The arithmetic average percent efficiency of the three runs shall determine the overall efficiency of the control device. [40 CFR 63.565(d)(9)]

9) Use of methods other than Method 25, 25A, or 25B shall be validated pursuant to Method 301 of Appendix A of 40 CFR Part 63. [40 CFR 63.565(d)(10)]

viii. *Baseline temperature*. The procedures in this paragraph shall be used to determine the baseline temperature required in 40 CFR 63.563(b)(4) for the combustion devices and to monitor the temperature as required in 40 CFR 63.564(e). The owner or operator shall comply with either 40 CFR 63.565(f)(1) or (2) as follows:[37] [40 CFR 63.565(f)]

1) *Baseline temperature from performance testing*. The owner or operator shall establish the baseline temperature as the temperature at the outlet point of the unit averaged over three test runs from 40

[37] MPLX Terminals, LLC—Algonquin Terminal conducted compliance testing on June 02-03, 2015. From the test run for the barge loading operation of gasoline, the baseline temperature was 935 °F and the associated control efficiency was 99.97%. From the test run for the barge loading operation of ethanol, the baseline temperature was 793 °F and the associated control efficiency was 99.95%. Previously, MPLX Terminals conducted compliance testing on January 12-13, 2010.

CFR 63.565(d)(9). Temperature shall be measured every 15 minutes. [40 CFR 63.565(f)(1)]

ix. If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified, the owner or operator shall refrain from conducting the performance test until the District approves the use of the alternative method when the District approves the site-specific test plan (if review of the site-specific test plan is requested) or until after the alternative method is approved (see the alternative test method in 40 CFR 63.7(f) of the General Provisions (Subpart A)). If the District does not approve the site-specific test plan (if review is requested) or the use of the alternative method within 30 days before the test is scheduled to begin, the performance test date shall be extended such that the owner or operator shall conduct the performance test within 60 calendar days after the District approves the site-specific test plan or after use of the alternative method is approved. Notwithstanding the requirements in the preceding two sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the District's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative. [40 CFR 63.565(m)(2)]

c. **TAC**

There are no routine testing requirements for this pollutant.

Alternative Operating Scenario

Natural gas is used to power the start-up and shutdown process of the vapor combustion unit (VCU or thermal oxidizer). The owner or operator is authorized to use propane as the gas-assist fuel if the natural gas supply is curtailed. The facility is also authorized to continue loading up to 3,000,000 gallons per year of gasoline/ethanol during an emergency episode, such as an ice storm or tornado, when the VCU is not operating. The facility shall continue to monitor loading rates and calculate emissions to ensure compliance is maintained.

Permit Shield

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1.

Off-Permit Documents

A revised 1.05 Compliance Plan referenced in this permit was received on December 19, 2014. Previous versions of the 1.05 Compliance Plan were received on February 23, 2010; February 16, 2006; March 29, 2000, and May 14, 1993.

Insignificant Activities

Equipment	Quantity	Basis for Exemption
Brazing, soldering, or welding equipment	1	Regulation 1.02, Appendix A, sec. 3.4
Emergency relief vents, stacks and ventilating systems	1	Regulation 1.02, Appendix A, sec. 3.10
Laboratory ventilating and exhausting systems which are not used for radioactive air contaminants.	1	Regulation 1.02, Appendix A, sec. 3.11
Blast cleaning equipment using a suspension of abrasives in water	1	Regulation 1.02, Appendix A, sec. 3.13
Soil or ground water contamination remediation projects that are entirely passive or entail the total removal of the contaminated substrate for disposal in a certified landfill	1	Regulation 1.02, Appendix A, sec. 3.20
Vacuum trucks rented and brought onsite to be utilized for transferring gasoline, ethanol, fuel oil, gasoline additives, and other volatile organic compounds from spills, pipeline work, and emptying stationary storage tanks. [38]	Up to 20	Regulation 1.02, sec. 1.38.1.1
Portable, horizontal fixed-roof storage (FRAC) tanks rented and brought onsite to be utilized for temporary storage of gasoline, ethanol, fuel oil, gasoline additives, and other volatile organic compounds (Capacity: 21,000 gallons each)[39]	Up to 20	Regulation 1.02, sec. 1.38.1.1
Railcar unloading operation for transferring ethanol to storage tanks	1	Regulation 1.02, sec. 1.38.1.1

[38] Formerly listed under permit 110-09-C.
[39] Formerly listed under permit 111-09-C.

Equipment	Quantity	Basis for Exemption
Oil-water separator containing less than 200 gallons a day	2	Regulation 1.02, sec. 1.38.1.1
Mobile compressor engine, 95 hp (0.24 MMBtu/hr)	1	Regulation 1.02, Appendix A, sec. 1. 1
Portable emergency generator, 13 hp (0.033 MMBtu/hr)	1	Regulation 1.02, Appendix A, sec. 2

1) Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.

2) Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.

3) The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.

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 shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16 section 4.3.5.3.6.

6) 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) to be reported on the annual emission inventory.

7) The District has determined pursuant to Regulation 2.16 section 4.1.9.4 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.

Protocol Checklist for Performance Test

A completed protocol should include the following information:

- ☐ Facility Name, Location, and ID #;
- ☐ Responsible Official and Environmental Contact Names;
- ☐ Permit #s which are requiring the test to be conducted;
- ☐ Test methods to be used (i.e. EPA Method 1, 2, 3, 4, and 5);
- ☐ Alternative test methods or description of modifications to the test methods to be used;
- ☐ Purpose of the test including equipment, and pollutant to be tested; the purpose may be described in the permit which requires the test to be conducted or may be to show compliance with a Federal Regulation or emission standard;
- ☐ 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.);
- ☐ Maximum rated production capacity of the system;
- ☐ Production-rate goal planned during the performance test for demonstration of compliance (if appropriate, based on limits);
- ☐ Method to be used for determining rate of production during the performance test;
- ☐ Method to be used for determining rate of production during subsequent operations of the process equipment to demonstrate compliance;
- ☐ Description of normal operation cycles;
- ☐ Discussion of operating conditions that tend to cause worse case pollution emissions; it is especially important to clarify this if worst case emissions do not come from the maximum production rate;
- ☐ Process Flow Diagram;
- ☐ List the type and manufacturer of the control equipment if any;
- ☐ 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
- ☐ 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
- ☐ Pipe, duct, stack, or flue diameter to be tested;

- ☐ 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;
- ☐ 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.
- ☐ The Stack Test Review fee shall be submitted with each stack test protocol.