

# INTERMEDIATE STATE PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

**Intermediate Operating Permit Number:** OPYYYY-###  
**Expiration Date:**  
**Installation ID:** 510-0016  
**Project Number:** 2017-11-028

**Installation Name and Address**

J.D. Streett & Company, Inc.  
3800 South 1st Street  
St. Louis City, MO 63118  
St. Louis County

**Parent Company's Name and Address**

J.D. Streett & Company  
144 Weldon Parkway  
Maryland Heights, MO 63043

**Installation Description:**

J. D. Streett & Company, Inc. is a petroleum product storage and loading facility along the Mississippi River in St. Louis City. The installation receives petroleum products through underground pipelines and barges, stores the petroleum products in aboveground storage tanks, and then loads tanker trucks and barges with the petroleum products utilizing a loading rack. The petroleum products at the installation include gasoline, diesel, and fuel additives. The installation is an synthetic minor source of volatile organic compounds (VOCs).

\_\_\_\_\_  
Effective Date

\_\_\_\_\_  
Director or Designee  
Department of Natural Resources

## Table of Contents

<b>I. INSTALLATION EQUIPMENT LISTING .....</b>	<b>3</b>
EMISSION UNITS WITH LIMITATIONS .....	3
EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS .....	3
<b>II. PLANT WIDE EMISSION LIMITATIONS.....</b>	<b>4</b>
PERMIT CONDITION PW001 .....	4
10 CSR 10-6.065(2)(O) and 10 CSR 10-6.065(4)(C)2. Voluntary Limitation(s) .....	4
<b>III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS .....</b>	<b>5</b>
PERMIT CONDITION 001 .....	5
10 CSR 10-5.220 Control of Emissions During Petroleum Liquid Storage, Loading, and Transfer.....	5
PERMIT CONDITION 002 .....	7
10 CSR 10-5.220 Control of Emissions During Petroleum Liquid Storage, Loading, and Transfer.....	7
PERMIT CONDITION 003 .....	8
10 CSR 10-5.500 Control of Emissions From Volatile Organic Liquid Storage .....	8
PERMIT CONDITION 004 .....	9
10 CSR 10-6.060 Construction Permits Required .....	9
Construction Permit #032015-021 Issued March 31, 2015.....	9
PERMIT CONDITION 005 .....	11
10 CSR 10-6.060 Construction Permits Required .....	11
Construction Permit #032018-002 Issued March 7, 2018.....	11
PERMIT CONDITION 006 .....	13
10 CSR 10-6.070 New Source Performance Regulations.....	13
40 CFR Part 60 Subpart XX – Standards of Performance for Bulk Gasoline Terminals.....	13
PERMIT CONDITION 007 .....	16
10 CSR 10-6.075 Maximum Achievable Control Technology.....	16
40 CFR Part 63 Subpart BBBBBB – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities.....	16
PERMIT CONDITION 008 .....	23
10 CSR 10-6.075 Maximum Achievable Control Technology.....	23
40 CFR Part 63 Subpart BBBBBB – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities.....	23
<b>IV. CORE PERMIT REQUIREMENTS .....</b>	<b>27</b>
<b>V. GENERAL PERMIT REQUIREMENTS.....</b>	<b>33</b>
<b>VI. ATTACHMENTS .....</b>	<b>37</b>
Attachment A .....	38
Fugitive Emission Observations .....	38
Attachment B.....	39
Tanks VOC Tracking Record .....	39
Attachment C.....	48
Roof Landing VOC Tracking Record.....	48
Attachment D .....	52
Liquid Loading VOC Tracking Record .....	52
Attachment E.....	53
Plant Wide VOC Tracking Record .....	53
Attachment F .....	54
Reference Equations for Tracking Tank VOC Emissions.....	54

## I. Installation Equipment Listing

### EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emits air pollutants and identified as having unit-specific emission limitations.

Emission Unit	Description of Emission Unit
EP-01	Truck Loading Rack #1 (South Rack), MHDR 92,880 gal/hr, 2015
EP-02	Truck Loading Rack #2 (North Rack), MHDR 92,880 gal/hr, 1973
EP-03	Tank #3: Gasoline, 2,368,000 Gallons, Internal Floating Roof, Mechanical Shoe, 1970
EP-04	Tank #4: #2 Diesel, 2,310,000 Gallons, Internal Floating Roof, 1973
EP-05	Tank #1: Gasoline, 3,360,000 Gallons, Internal Floating Roof, Double Wiper Seal, 1970
EP-06	Tank #7: #2 Diesel, 3,360,000 Gallons, Vertical Fixed Roof, Prior to June 1973
EP-07	Tank #2: Gasoline, 2,310,000 Gallons, Internal Floating Roof, Mechanical Shoe, 1970
EP-08	Tank #6: Gasoline, 3,360,000 Gallons, Internal Floating Roof, Mechanical Shoe, Prior to June 1973
EP-09	Tank #5: Gasoline, 3,360,000 Gallons, Internal Floating Roof, Mechanical Shoe, 1970
EP-10	Tank #8: Ethanol, 30,000 Gallons, Vertical Fixed Roof, 1980
EP-11	Tank #9: Ethanol, 30,000 Gallons, Vertical Fixed Roof, 1980
EP-12	Tank #10: Df Additive, 5,000 Gallons, Horizontal Fixed Roof, 1970
EP-13	Tank #11: Jds Additive, 10,000 Gallons, Vertical Fixed Roof, 1994
EP-14	Tank #13: Exxon Mobile Oil Additive, 10,000 Gallons, Vertical Fixed Roof, 1994
EP-15	Tank #12: Shell Additive, 10,000 Gallons, Vertical Fixed Roof, 1994
EP-16A	Barge Loading/Unloading, Diesel Fuel, MHDR 126,000 gal/hr, 2003
EP-16B	Barge Unloading; Gasoline, MHDR 126,000 gal/hr, 2003
EP-18	Tank #15: Lubricity Diesel Additive, 8,000 Gallons, Vertical Fixed Roof, 1973
EP-19	Tank #16: Soy Oil; 10,000 Gallons, Vertical Fixed Roof, 2009
EP-20	Tank #17: Ethanol; 30,000 Gallons, Vertical Fixed Roof, 2011
EP-21	Tank #18: Ethanol; 30,000 Gallons, Vertical Fixed Roof, 2011

### EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS

The following list provides a description of the equipment, which does not have unit specific limitations at the time of permit issuance.

Emission Unit	Description of Emission Unit
-	Haul Road

## II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect on the date of permit issuance. The plant wide conditions apply to all emission units at this installation. All emission units are listed in Section I under Emission Units with Limitations and Emission Units without Limitations.

### PERMIT CONDITION PW001

10 CSR 10-6.065(2)(O) and 10 CSR 10-6.065(4)(C)2. Voluntary Limitation(s)

#### **Emission Limitations:**

The permittee shall emit less than 100.0 tons of VOCs in any consecutive 12-month period from the entire installation.

#### **Monitoring/Recordkeeping:**

- 1) The permittee shall use Attachment B, Attachment C, Attachment D and Attachment E, or equivalent forms, to demonstrate compliance with the VOC emission limits.
- 2) The permittee shall maintain all records required by this permit, onsite, for the most recent sixty (60) months and shall immediately make such records available to any Missouri Department of Natural Resources' personnel upon request. These records shall include Safety Data Sheets (SDS) for all materials used.

#### **Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section at P.O. Box 176, Jefferson City, MO 65102 and [AirComplianceReporting@dnr.mo.gov](mailto:AirComplianceReporting@dnr.mo.gov), no later than ten (10) days after an exceedance of the emission limitation.
- 2) The permittee shall report any deviations from the requirements of this permit condition in the compliance certification required by Section V of this permit.

### III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect on the date of permit issuance.

<b>PERMIT CONDITION 001</b>		
10 CSR 10-5.220 Control of Emissions During Petroleum Liquid Storage, Loading, and Transfer		
Emission Unit	Description	Construction Date
EP-03	Tank #3: Gasoline, 2,368,000 Gallons, Internal Floating Roof, Mechanical Shoe	1970
EP-05	Tank #1: Gasoline, 3,360,000 Gallons, Internal Floating Roof, Double Wiper Seal	1970
EP-07	Tank #2: Gasoline, 2,310,000 Gallons, Internal Floating Roof, Mechanical Shoe	1970
EP-08	Tank #6: Gasoline, 3,360,000 Gallons, Internal Floating Roof, Mechanical Shoe	Prior to June 1973
EP-09	Tank #5: Gasoline, 3,360,000 Gallons, Internal Floating Roof, Mechanical Shoe	1970

**Operational Limitations:**

- 1) The permittee shall not cause or permit the storage in any stationary storage tank of more than forty thousand (40,000) gallons capacity of any petroleum liquid having a true vapor pressure of one and five-tenths (1.5) pounds per square inch absolute (psia) or greater at ninety degrees Fahrenheit (90 °F), unless the storage tank is a pressure tank capable of maintaining working pressures sufficient at all times to prevent volatile organic compound (VOC) vapor or gas loss to the atmosphere or is equipped with one (1) of the following vapor loss control devices: [5.220(3)(A)1.]
  - a) A floating roof, consisting of a pontoon type, double-deck type or internal floating cover or external floating cover, that rests on the surface of the liquid contents and is equipped with a closure seal(s) to close the space between the roof edge and tank wall. [5.220(3)(A)1.A.]
    - i) Control equipment described in 5.220(3)(A)1.A. shall not be allowed if the petroleum liquid other than gasoline has a true vapor pressure of 11.1 psia or greater at ninety degrees Fahrenheit (90 °F). All storage tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place. [5.220(3)(A)2.]
  - b) A vapor recovery system with all storage tank gauging and sampling devices gas-tight, except when gauging or sampling is taking place. The vapor disposal portion of the vapor recovery system shall consist of an absorber system, condensation system, membrane system or equivalent vapor disposal system that processes the vapor and gases from the equipment being controlled; or [5.220(3)(A)1.B.]
  - c) Other equipment or means of equal efficiency for purposes of air pollution control that may be approved by the staff director. [5.220(3)(A)1.C.]

**Recordkeeping:**

- 1) The permittee shall maintain written records of maintenance (both routine and unscheduled) performed on the tanks, all repairs made, the results of all tests performed, and the type and quantity of petroleum liquid stored in them. [5.220(4)(A)]
- 2) The permittee shall keep records for five (5) years and make these records available to the staff director within five (5) business days of a request. [5.220(4)(A)]

**Reporting:**

The permittee shall report any deviations from the requirements of this permit condition in the annual compliance certification required by Section V of this permit.

<b>PERMIT CONDITION 002</b>		
10 CSR 10-5.220 Control of Emissions During Petroleum Liquid Storage, Loading, and Transfer		
<b>Emission Unit</b>	<b>Description</b>	<b>Construction Date</b>
EP-01	Truck Loading Rack #1 (South Rack), MHDR 92,880 gal/hr	2015
EP-02	Truck Loading Rack #2 (North Rack), MHDR 92,880 gal/hr	1973

**Operational Limitations:**

- 1) The permittee shall not cause or permit the loading of gasoline into any delivery vessel from a gasoline distribution facility unless the gasoline distribution facility is equipped with a vapor recovery system or equivalent. The delivery vessel must be in compliance with 5.220(3)(D). [5.220(3)(B)1.]
- 2) Gasoline loading shall be accomplished in a manner that the displaced vapors 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. The vapor disposal portion of the vapor recovery system shall consist of one (1) of the following: [5.220(3)(B)2.]
  - a) An absorber system, condensation system, membrane system, or equivalent vapor disposal system that processes the vapors and gases from the equipment being controlled and limits the discharge of VOC into the atmosphere to ten (10) milligrams of VOC vapor per liter of gasoline loaded; [5.220(3)(B)2.A.]
  - b) A vapor handling system that directs the vapor to a fuel gas system; or [5.220(3)(B)2.B.]
  - c) Other equipment of an efficiency equal to or greater than 10 CSR 10-5.220(3)(B)2.A. or B. if approved by the Director. [5.220(3)(B)2.C.]

**Monitoring/Testing:**

*Gasoline Loading.* Gasoline loading testing procedures to determine compliance with 5.220(3)(B)2.A. shall be according to Method 25— Determination of Total Gaseous Nonmethane Organic Emissions as Carbon as specified in 10 CSR 10-6.030(22) or by any method determined by the staff director. The staff director, at any time, may conduct monitoring to confirm compliance with 10 CSR 10-5.220. [5.220(5)(A)]

**Recordkeeping:**

- 1) The permittee shall keep complete records documenting the number of delivery vessels loaded and their owners. [5.220(4)(B)]
- 2) The permittee shall keep records for five (5) years and make these records available to the staff director within five (5) business days of a request. [5.220(4)(B)]

**Reporting:**

The permittee shall report any deviations from the requirements of this permit condition in the annual compliance certification required by Section V of this permit.

<b>PERMIT CONDITION 003</b>		
10 CSR 10-5.500 Control of Emissions From Volatile Organic Liquid Storage		
<b>Emission Unit</b>	<b>Description</b>	<b>Construction Date</b>
EP-04	Tank #4: #2 Diesel, 2,310,000 Gallons, Internal Floating Roof	1973
EP-06	Tank #7: #2 Diesel, 3,360,000 Gallons, Vertical Fixed Roof	Prior to 1973
EP-10	Tank #8: Ethanol, 30,000 Gallons, Vertical Fixed Roof	1980
EP-11	Tank #9: Ethanol, 30,000 Gallons, Vertical Fixed Roof	1980
EP-12	Tank #10: Df Additive, 5,000 Gallons, Horizontal Fixed Roof	1970
EP-13	Tank #11: Jds Additive, 10,000 Gallons, Vertical Fixed Roof	1994
EP-14	Tank #13: Exxon Mobile Oil Additive, 10,000 Gallons, Vertical Fixed Roof	1994
EP-15	Tank #12: Shell Additive, 10,000 Gallons, Vertical Fixed Roof	1994
EP-18	Tank #15: Lubricity Diesel Additive, 8,000 Gallons, Vertical Fixed Roof	1973
EP-19	Tank #16: Soy Oil; 10,000 Gallons, Vertical Fixed Roof	2009
EP-20	Tank #17: Ethanol; 30,000 Gallons, Vertical Fixed Roof	2011
EP-21	Tank #18: Ethanol; 30,000 Gallons, Vertical Fixed Roof	2011

**Recordkeeping:**

- 1) The permittee shall maintain readily accessible records of the dimensions of the storage vessel and an analysis of the capacity of the storage vessel. [5.500(4)(E)]
- 2) The records described in 5.500(4)(E) of shall be kept on-site for the life of the source. The records required by 10 CSR 10-5.500 shall be made available to the department immediately upon request. [5.500(4)(H)]

**Reporting:**

The permittee shall report any deviations from the requirements of this permit condition in the annual compliance certification required by Section V of this permit.

<b>PERMIT CONDITION 004</b>		
10 CSR 10-6.060 Construction Permits Required		
Construction Permit #032015-021 Issued March 31, 2015		
<b>Emission Unit</b>	<b>Description</b>	<b>Construction Date</b>
EP-01	Truck Loading Rack #1 (South Rack), MHDR 92,880 gal/hr	2015
EP-02	Truck Loading Rack #2 (North Rack), MHDR 92,880 gal/hr	1973

**Emission Limitations:**

The permittee shall emit less than 2.18 milligrams of VOC per liter of gasoline loaded. The permittee shall conduct performance testing according to Special Condition 3.E of construction permit 032015-021 to demonstrate compliance with this requirement. [Special Condition 3.D.]

**Operational Limitations:**

- 1) The permittee shall control VOC emissions from the gasoline bays of EP-01 (Truck Loading Rack #1) and EP-02 (Truck Loading Rack #2) using an activated carbon adsorption system. [Special Condition 2.A.]
- 2) The activated carbon adsorption system shall be operated and maintained in accordance with the manufacturer's specifications and the following requirements: [Special Condition 2.B.]
  - a) The permittee shall monitor the vacuum level using a pressure transmitter installed in the vacuum pump suction line, with the measurements displayed on a gauge that can be visibly observed. [Special Condition 2.B.1.]
  - b) The permittee shall conduct annual testing of the carbon activity for the carbon in the carbon bed. Carbon activity shall be tested in accordance with the butane working capacity test of the American Society for Testing and Materials (ASTM) Method D5228-92 or other method upon Air Pollution Control Program approval. [Special Condition 2.B.2.]
  - c) The permittee shall conduct monthly measurements of the carbon bed outlet VOC concentration over the last five minutes of an adsorption cycle for the carbon bed, documenting the highest measured VOC concentration. Measurements shall be made using a portable analyzer, or a permanently mounted analyzer, in accordance with EPA Method 21 for open-ended lines. [Special Condition 2.B.3.]
  - d) The permittee shall verify at least once each operating day that the valves are properly sequenced, the cycle time, the gasoline flow, the purge air flow, and the operating temperature are all within the appropriate operating range. Verification shall be through visual observation, or through an automated alarm and shutdown system that monitors system operation. [Special Condition 2.B.4.]
  - e) The permittee shall perform semi-annual preventative maintenance inspections of the carbon adsorption system, including the automated alarm and shutdown system if so equipped. [Special Condition 2.B.5.]
  - f) The permittee shall document the maximum vacuum level observed each day and the maximum VOC concentration observed each month. The maximum vacuum level and VOC concentration shall be maintained within  $\pm 10$  percent of the average values observed during the most recent carbon activity test. [Special Condition 2.B.6.]
- 3) The permittee shall maintain a copy of the activated carbon adsorption system manufacturer's operations manual on site. [Special Condition 2.C.]

**Monitoring/Recordkeeping:**

- 1) The permittee shall maintain an operating and maintenance log for the activated carbon adsorption system which shall include the following:[Special Condition 2.D.]
  - a) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and [Special Condition 2.D.1.]
  - b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc. [Special Condition 2.D.2.]
- 2) The permittee shall not handle gasoline with an RVP greater than 13 during the calendar months of October, November, December, January, February, March and April. [Special Condition 3.A.]
- 3) The permittee shall not handle gasoline with an RVP greater than 9 during the calendar months of May, June, July August and September. [Special Condition 3.B.]
- 4) The permittee shall test the gasoline at least once each calendar month to determine the vapor pressure. The permittee shall use ASTM D6378-10 or ASTM D5191-10b to determine the vapor pressure of the gasoline. Other test methods may be used upon receipt of written approval by the Air Pollution Control Program. [Special Condition 3.C.]
- 5) The permittee shall test the VOC emission rate from the activated carbon adsorption system at least once every five years using EPA Test Methods 25A or 25B or other methods upon Air Pollution Control Program approval. [Special Condition 3.E.]
  - a) A completed Proposed Test Plan Form shall be submitted to the Air Pollution Control Program 30 days prior to the proposed test date so that the Air Pollution Control Program may arrange a pretest meeting, if necessary, and assure that the test date is acceptable for an observer to be present. The Proposed Test Plan may serve the purpose of notification and must be approved by the Director prior to conducting the required emission testing. [Special Condition 3.E.1.]
  - b) Two copies of a written report of the performance test results shall be submitted to the Director within 30 days of completion of any required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required U.S. EPA Method for at least one sample run. [Special Condition 3.E.2.]
  - c) The test report is to fully account for all operational and emission parameters addressed both in the permit conditions as well as in any other applicable state or federal rules or regulations. [Special Condition 3.E.3.]
- 6) The permittee shall keep all records for a minimum of five (5) years and make available to department personnel upon request.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 and [AirComplianceReporting@dnr.mo.gov](mailto:AirComplianceReporting@dnr.mo.gov), no later than ten (10) days after the end of the month during which records indicate an exceedance of a limitation.
- 2) The permittee shall report any deviations from the requirements of this permit condition in the annual compliance certification required by Section V of this permit.

<b>PERMIT CONDITION 005</b>		
10 CSR 10-6.060 Construction Permits Required Construction Permit #032018-002 Issued March 7, 2018		
<b>Emission Unit</b>	<b>Description</b>	<b>Construction Date</b>
EP-03	Tank #3: Gasoline, 2,368,000 Gallons, Internal Floating Roof, Mechanical Shoe	1970
EP-05	Tank #1: Gasoline, 3,360,000 Gallons, Internal Floating Roof, Double Wiper Seal	1970
EP-07	Tank #2: Gasoline, 2,310,000 Gallons, Internal Floating Roof, Mechanical Shoe	1970
EP-08	Tank #6: Gasoline, 3,360,000 Gallons, Internal Floating Roof, Mechanical Shoe	Prior to June 1973
EP-09	Tank #5: Gasoline, 3,360,000 Gallons, Internal Floating Roof, Mechanical Shoe	1970

**Operational Limitation:**

- 1) The permittee shall control emissions from gasoline storage tanks listed above using an activated carbon adsorption system. [Special Condition 1.A.]

**Monitoring/Recordkeeping:**

- 1) The activated carbon adsorption system shall be operated and maintained in accordance with the manufacturer's specifications and the following requirements: [Special Condition 1.B.]
  - a) The permittee shall monitor the vacuum level using a pressure transmitter installed in the vacuum pump suction line, with the measurements displayed on a gauge that can be visibly observed. [Special Condition 1.B.1.]
  - b) The permittee shall conduct annual testing of the carbon activity for the carbon in the carbon bed. Carbon activity shall be tested in accordance with the butane working capacity test of the American Society for Testing and Materials (ASTM) Method D5228-92 or other method upon Air Pollution Control Program approval. [Special Condition 1.B.2.]
  - c) The permittee shall conduct monthly measurements of the carbon bed outlet VOC concentration over the last five minutes of an adsorption cycle for the carbon bed, documenting the highest measured VOC concentration. Measurements shall be made using a portable analyzer, or a permanently mounted analyzer, in accordance with EPA Method 21 for open-ended lines. [Special Condition 1.B.3.]
  - d) The permittee shall document the maximum vacuum level observed each day and the maximum VOC concentration observed each month. The maximum vacuum level and VOC concentration shall be maintained within  $\pm 10$  percent of the average values observed during the most recent carbon activity test. [Special Condition 1.B.4.]
  - e) The permittee shall verify at least once each operating day that the valves are properly sequenced and that the cycle time, the gasoline flow, the purge air flow, and the operating temperature are all within the appropriate operating range. Verification shall be through visual observation, or through an automated alarm and shutdown system that monitors system operation. [Special Condition 1.B.5.]
  - f) The permittee shall perform semi-annual preventative maintenance inspections of the carbon adsorption system, including the automated alarm and shutdown system if so equipped. [Special Condition 1.B.6.]

- 2) The permittee shall maintain a copy of the activated carbon adsorption system manufacturer's operations manual on site. [Special Condition 1.C.]
- 3) The permittee shall maintain an operating and maintenance log for the activated carbon adsorption system which shall include the following: [Special Condition 1.D.]
  - a) Incidents of malfunction, with impact on emissions (tons), duration of event, probable cause, and corrective actions; and [Special Condition 1.D.1.]
  - b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc. [Special Condition 1.D.2.]
- 4) The permittee shall keep all records for a minimum of five (5) years and make available to department personnel upon request.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 and [AirComplianceReporting@dnr.mo.gov](mailto:AirComplianceReporting@dnr.mo.gov) , no later than ten (10) days after the end of the month during which records indicate an exceedance of a limitation.
- 2) The permittee shall report any deviations from the requirements of this permit condition in the annual compliance certification required by Section V of this permit.

<b>PERMIT CONDITION 006</b>		
10 CSR 10-6.070 New Source Performance Regulations 40 CFR Part 60 Subpart XX – Standards of Performance for Bulk Gasoline Terminals		
<b>Emission Unit</b>	<b>Description</b>	<b>Construction Date</b>
EP-01	Truck Loading Rack #1 (South Rack), MHDR 92,880 gal/hr	2015

**Emission Limitations:**

The emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline tank trucks are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded, except as noted in §60.502(c). [§60.502(b)]

**Operational Limitations:**

- 1) The permittee shall comply with the equipment specifications as specified below: [§60.502]
  - a) The permittee shall equip each loading rack that loads gasoline tank trucks at the bulk gasoline terminal with a vapor collection system designed to collect the total organic compounds vapors displaced from tank trucks during product loading. [§60.502(a)]
  - b) 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. [§60.502(d)]
  - c) Loadings of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures: [§60.502(e)]
    - i) The permittee shall obtain the vapor tightness documentation described in §60.505(b) for each gasoline tank truck which is to be loaded at the affected facility. [§60.502(e)(1)]
    - ii) The permittee shall require the tank identification number to be recorded as each gasoline tank truck is loaded at the affected facility. [§60.502(e)(2)]
    - iii) The permittee shall cross-check each tank identification number obtained in §60.502(e)(2) 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: [§60.502(e)(3)(i)]
      - (1) 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 [§60.502(e)(3)(i)(A)]
      - (2) If less than an average of one gasoline tank truck per month over the last 52 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed semiannually. [§60.502(e)(3)(i)(B)]
    - iv) If either the quarterly or semiannual cross-check provided in §60.502(e)(3)(i)(A) through (B) reveals that these conditions were not maintained, the permittee must return to biweekly monitoring until such time as these conditions are again met. [§60.502(e)(3)(ii)]
    - v) The permittee 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 §60.502(e)(3). [§60.502(e)(4)]
    - vi) The permittee shall take steps assuring that the nonvapor-tight gasoline tank truck will not be reloaded at the affected facility until vapor tightness documentation for that tank is obtained. [§60.502(e)(5)]
    - vii) Alternate procedures to those described in §60.502(e)(1) through (5) for limiting gasoline tank truck loadings may be used upon application to, and approval by, the Director. [§60.502(e)(6)]

- d) The permittee 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. [§60.502(f)]
- e) The permittee shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the affected facility. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the affected loading racks. [§60.502(g)]
- f) The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading. This level is not to be exceeded when measured by the procedures specified in §60.503(d). [§60.502(h)]
- g) No pressure-vacuum vent in the bulk gasoline terminal's vapor collection system shall begin to open at a system pressure less than 4,500 pascals (450 mm of water). [§60.502(i)]

**Monitoring/Testing:**

- 1) The permittee shall conduct a monthly inspection of the vapor collection system, the vapor processing system, and loading rack during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of this inspection, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected. [§60.502(j)]

**Recordkeeping:**

- 1) The permittee shall keep the tank truck vapor tightness documentation required under §60.502(e)(1) on file at the terminal in a permanent form available for inspection. [§60.505(a)]
- 2) 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: [§60.505(b)]
  - a) Test title: Gasoline Delivery Tank Pressure Test—EPA Reference Method 27. [§60.505(b)(1)]
  - b) Tank owner and address. [§60.505(b)(2)]
  - c) Tank identification number. [§60.505(b)(3)]
  - d) Testing location. [§60.505(b)(4)]
  - e) Date of test. [§60.505(b)(5)]
  - f) Tester name and signature. [§60.505(b)(6)]
  - g) Witnessing inspector, if any: Name, signature, and affiliation. [§60.505(b)(7)]
  - h) Test results: Actual pressure change in 5 minutes, mm of water (average for 2 runs). [§60.505(b)(8)]
- 3) The permittee shall maintain records of each monthly leak inspection of the vapor collection system, the vapor processing system, and loading rack required under §60.502(j) on file at the terminal for at least five years. Inspection records shall include, as a minimum, the following information: [§60.505(c)]
  - a) Date of inspection. [§60.505(c)(1)]
  - b) Findings (may indicate no leaks discovered; or location, nature, and severity of each leak). [§60.505(c)(2)]
  - c) Leak determination method. [§60.505(c)(3)]
  - d) Corrective action (date each leak repaired; reasons for any repair interval in excess of 15 days). [§60.505(c)(4)]
  - e) Inspector name and signature. [§60.505(c)(5)]

- 4) The permittee shall keep documentation of all notifications of each non-vapor-tight gasoline tank truck loaded required by §60.502(e)(4) on file at the terminal for at least 5 years. [§60.505(d)]
- 5) As an alternative to keeping records at the terminal of each gasoline cargo tank test result as required in §60.505(a), (c), and (d), the permittee may comply with the requirements in either §60.505(e)(1) or (2). [§60.505(e)]
  - a) An electronic copy of each record is instantly available at the terminal. [§60.505(e)(1)]
    - i) The copy of each record in §60.505(e)(1) is an exact duplicate image of the original paper record with certifying signatures. [§60.505(e)(1)(i)]
    - ii) The permitting authority is notified in writing that each terminal using this alternative is in compliance with §60.505(e)(1). [§60.505(e)(1)(ii)]
  - b) 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. [§60.505(e)(2)]
    - i) The copy of each record in §60.505(e)(2) is an exact duplicate image of the original paper record with certifying signatures. [§60.505(e)(2)(i)]
    - ii) The permitting authority is notified in writing that each terminal using this alternative is in compliance with §60.505(e)(2). [§60.505(e)(2)(ii)]

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 and [AirComplianceReporting@dnr.mo.gov](mailto:AirComplianceReporting@dnr.mo.gov), no later than ten (10) days after the end of the month during which records indicate an exceedance of a limitation.
- 2) The permittee shall report any deviations from the requirements of this permit condition in the annual compliance certification required by Section V of this permit.

<b>PERMIT CONDITION 007</b>		
10 CSR 10-6.075 Maximum Achievable Control Technology 40 CFR Part 63 Subpart BBBBBB – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities		
Emission Unit	Description	Construction Date
EP-01	Truck Loading Rack #1 (South Rack), MHDR 92,880 gal/hr	2015
EP-02	Truck Loading Rack #2 (North Rack), MHDR 92,880 gal/hr	1973

**Operational Limitations:**

- 1) The permittee 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. [§63.11085(a)]
- 2) The permittee must meet each the following applicable emission limit and management practices in Table 2 to Subpart BBBBBB of Part 63. [§63.11088(a)]
  - a) The permittee must equip loading rack(s) with a vapor collection system designed to collect the TOC vapors displaced from cargo tanks during product loading; and [Item (1)(a) of Table 2 to Subpart BBBBBB of Part 63]
  - b) The permittee must 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 [Item (1)(b) of Table 2 to Subpart BBBBBB of Part 63]
  - c) The permittee must 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 [Item (1)(c) of Table 2 to Subpart BBBBBB of Part 63]
  - d) The permittee must limit the loading of gasoline into gasoline cargo tanks that are vapor tight using the procedures specified in §60.502(e) through (j). For the purposes of , the term “tank truck” as used in §60.502(e) through (j) of Chapter 40 means “cargo tank” as defined in §63.11100. [Item (1)(d) of Table 2 to Subpart BBBBBB of Part 63]
    - i) The permittee shall obtain the vapor tightness documentation described in §60.505(b) for each gasoline tank truck which is to be loaded at the affected facility. [§60.502(e)(1)]
    - ii) The permittee shall require the tank identification number to be recorded as each gasoline tank truck is loaded at the affected facility. [§60.502(e)(2)]
    - iii) The permittee shall cross-check each tank identification number obtained in §60.502(e)(2) 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: [§60.502(e)(3)(i)]
      - (1) 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 [§60.502(e)(3)(i)(A)]
      - (2) If less than an average of one gasoline tank truck per month over the last 52 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed semiannually. [§60.502(e)(3)(i)(B)]

- iv) If either the quarterly or semiannual cross-check provided in §60.502(e)(3)(i)(A) through (B) reveals that these conditions were not maintained, the source must return to biweekly monitoring until such time as these conditions are again met. [§60.502(e)(3)(ii)]
- v) The permittee 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 §60.502(e)(3). [§60.502(e)(4)]
- vi) The permittee shall take steps assuring that the nonvapor-tight gasoline tank truck will not be reloaded at the affected facility until vapor tightness documentation for that tank is obtained. [§60.502(e)(5)]
- vii) Alternate procedures to those described in §60.502(e)(1) through (5) for limiting gasoline tank truck loadings may be used upon application to, and approval by, the Administrator. [§60.502(e)(6)]
- viii) The permittee 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. [§60.502(f)]
- e) The permittee shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the affected facility. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the affected loading racks. [§60.502(g)]
- f) The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading. This level is not to be exceeded when measured by the procedures specified in §60.503(d). [§60.502(h)]
- g) No pressure-vacuum vent in the bulk gasoline terminal's vapor collection system shall begin to open at a system pressure less than 4,500 pascals (450 mm of water). [§60.502(i)]
- h) Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of §60.502(j), 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. [§60.502(j)]

**General Provisions:**

The permittee shall comply with the General Provisions that apply to the facility in Table 3 to MACT BBBBBB. [§63.11098]

**Testing Requirements:**

- 1) Because the permittee is operating their gasoline loading rack in compliance with an enforceable State permit that requires their loading rack to meet an emission limit of 80 milligrams (mg), or less, per liter of gasoline loaded (mg/l), the permittee may submit a statement by a responsible official of the permittee's facility certifying the compliance status of the permittee's loading rack in lieu of the test required under §63.11092(a)(1). [§63.11092(a)(2)]
- 2) The permittee 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 §63.11092(b)(1)(i)(B)(1) and (2). [§63.11092(b)]
  - a) The permittee shall determine a monitored operating parameter value for the vapor processing system using the procedures specified in §63.11092(b)(1)(i). During the performance test,

continuously record the operating parameter as specified under §63.11092(b)(1)(i).  
[§63.11092(b)(1)]

i) The permittee shall monitor the operation of the system as specified in §63.11092(b)(1)(i)(B). [§63.11092(b)(1)(i)]

(1) The permittee shall meet the requirements listed in §63.11092(b)(1)(i)(B)(I) and (2).  
[§63.11092(b)(1)(i)(B)]

(a) Carbon adsorption devices shall be monitored as specified in §63.11092(b)(1)(i)(B)(1)(i),(ii), and (iii). [§63.11092(b)(1)(i)(B)(1)]

(i) 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. [§63.11092(b)(1)(i)(B)(1)(i)]

(ii) Conduct annual testing of the carbon activity for the carbon in each carbon bed. Carbon activity shall be tested in accordance with the butane working capacity test of the American Society for Testing and Materials (ASTM) Method D 5228-92 (incorporated by reference, see §63.14), or by another suitable procedure as recommended by the manufacturer. [§63.11092(b)(1)(i)(B)(1)(ii)]

(iii) Conduct monthly measurements of the carbon bed outlet volatile organic compounds (VOC) concentration over the last 5 minutes of an adsorption cycle for each carbon bed, documenting the highest measured VOC concentration. Measurements shall be made using a portable analyzer, or a permanently mounted analyzer, in accordance with 40 CFR part 60, Appendix A-7, EPA Method 21 for open-ended lines. [§63.11092(b)(1)(i)(B)(1)(iii)]

(b) Develop and submit to the Administrator a monitoring and inspection plan that describes the approach for meeting the requirements in §63.11092(b)(1)(i)(B)(2)(i) through (v). [§63.11092(b)(1)(i)(B)(2)]

(i) 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. [§63.11092(b)(1)(i)(B)(2)(i)]

(ii) The permittee 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.  
[§63.11092(b)(1)(i)(B)(2)(ii)]

(iii) The permittee shall perform semi-annual preventive maintenance inspections of the carbon adsorption system, including the automated alarm or shutdown system for those units so equipped, according to the recommendations of the manufacturer of the system. [§63.11092(b)(1)(i)(B)(2)(iii)]

(iv) The monitoring plan developed under §63.11092(b)(1)(i)(B)(2) shall specify conditions that would be considered malfunctions of the carbon adsorption system during the inspections or automated monitoring performed under §63.11092(b)(1)(i)(B)(2)(i) through (iii), describe specific corrective actions that will be taken to correct any malfunction, and define what the permittee would

consider to be a timely repair for each potential malfunction.

[§63.11092(b)(1)(i)(B)(2)(iv)]

- (v) The permittee 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.

[§63.11092(b)(1)(i)(B)(2)(v)]

**Monitoring:**

- 1) The permittee shall perform a monthly leak inspection of all equipment in gasoline service, as defined in §63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [§63.11089(a)]
- 2) When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak, except as provided in §63.11089(d). [§63.11089(c)]
- 3) Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The permittee shall provide in the semiannual report specified in §63.11095(b), the reason(s) why the repair was not feasible and the date each repair was completed. [§63.11089(d)]
- 4) The permittee shall 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 §63.11092(b)(1). [§63.11092(d)(1)]
  - a) In cases where an alternative parameter pursuant to §63.11092(b)(5)(i) is approved, the permittee shall operate the vapor processing system in a manner not to exceed or not to go below, as appropriate, the alternative operating parameter value. [§63.11092(d)(2)]
- 5) 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 §63.11088(a), except as specified in §63.11092(d)(4). [§63.11092(d)(3)]
- 6) For the monitoring and inspection, malfunctions that are discovered shall not constitute a violation of the emission standard in §63.11088(a) if corrective actions as described in the monitoring and inspection plan are followed. The permittee must: [§63.11092(d)(4)]
  - a) Initiate corrective action to determine the cause of the problem within 1 hour; [§63.11092(d)(4)(i)]
  - b) Initiate corrective action to fix the problem within 24 hours; [§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; [§63.11092(d)(4)(iii)]
  - d) Minimize periods of start-up, shutdown, or malfunction; and [§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. [§63.11092(d)(4)(v)]

**Recordkeeping:**

- 1) *Monthly Leak Inspection.* A monthly leak inspection log book shall be used and shall be signed by the permittee at the completion of each inspection. 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. [§63.11089(b)]
- 2) Each detection of a liquid or vapor leak shall be recorded in the log book. [§63.11089(c)]
- 3) The permittee shall record in the log book for each leak that is detected the information specified in §63.11094(e)(1) through (7). [§63.11094(e)]
  - a) The equipment type and identification number. [§63.11094(e)(1)]
  - b) The nature of the leak (i.e., vapor or liquid) and the method of detection (i.e., sight, sound, or smell). [§63.11094(e)(2)]
  - c) The date the leak was detected and the date of each attempt to repair the leak. [§63.11094(e)(3)]
  - d) Repair methods applied in each attempt to repair the leak. [§63.11094(e)(4)]
  - e) “Repair delayed” and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak. [§63.11094(e)(5)]
  - f) The expected date of successful repair of the leak if the leak is not repaired within 15 days. [§63.11094(e)(6)]
  - g) The date of successful repair of the leak. [§63.11094(e)(7)]
- 4) *Gasoline Cargo Tank Loading.* The permittee shall keep records of the test results for each gasoline cargo tank loading at the facility as specified in §63.11094(b)(1) through (3). [§63.11094(b)]
  - a) Annual certification testing performed under §63.11092(f)(1) and periodic railcar bubble leak testing performed under §63.11092(f)(2). [§63.11094(b)(1)]
  - b) 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: [§63.11094(b)(2)]
    - i) *Name of test:* Annual Certification Test—Method 27 or Periodic Railcar Bubble Leak Test Procedure. [§63.11094(b)(2)(i)]
    - ii) Cargo tank owner's name and address. [§63.11094(b)(2)(ii)]
    - iii) Cargo tank identification number. [§63.11094(b)(2)(iii)]
    - iv) Test location and date. [§63.11094(b)(2)(iv)]
    - v) Tester name and signature. [§63.11094(b)(2)(v)]
    - vi) *Witnessing inspector, if any:* Name, signature, and affiliation. [§63.11094(b)(2)(vi)]
    - vii) *Vapor tightness repair:* Nature of repair work and when performed in relation to vapor tightness testing. [§63.11094(b)(2)(vii)]
    - viii) *Test results:* Test pressure; pressure or vacuum change, mm of water; time period of test; number of leaks found with instrument; and leak definition. [§63.11094(b)(2)(viii)]
- 5) As an alternative to keeping records at the terminal of each gasoline cargo tank test result as required in §63.11094(b), the permittee may comply with the requirements in either §63.11094(c)(1) or (c)(2). [§63.11094(c)]
  - a) An electronic copy of each record is instantly available at the terminal. [§63.11094(c)(1)]
    - i) The copy of each record in §63.11094(c)(1) is an exact duplicate image of the original paper record with certifying signatures. [§63.11094(c)(1)(i)]
    - ii) The Administrator is notified in writing that each terminal using this alternative is in compliance with §63.11094(c)(1). [§63.11094(c)(1)(ii)]
  - b) 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. [§63.11094(c)(2)]

- i) The copy of each record in §63.11094(c)(2) is an exact duplicate image of the original paper record with certifying signatures. [§63.11094(c)(2)(i)]
  - ii) The Administrator is notified in writing that each terminal using this alternative is in compliance with §63.11094(c)(2). [§63.11094(c)(2)(ii)]
- 6) The permittee 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 §63.11089, the record shall contain a full description of the program. [§63.11094(d)]
  - 7) The permittee shall keep an up-to-date, readily accessible record of the continuous monitoring data required under §63.11092(b) or §63.11092(e). 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. [§63.11094(f)(1)]
  - 8) Record and report simultaneously with the Notification of Compliance Status required under §63.11093(b): [§63.11094(f)(2)]
    - a) All data and calculations, engineering assessments, and manufacturer's recommendations used in determining the operating parameter value under §63.11092(b). [§63.11094(f)(2)(i)]
  - 9) If the permittee requests approval to use a vapor processing system or monitor an operating parameter other than those specified in §63.11092(b), the permittee shall submit a description of planned reporting and recordkeeping procedures. [§63.11094(f)(5)]
  - 10) The permittee shall keep records affected source under 40 CFR Part 63 Subpart BBBBBB as specified in §63.11094(g)(1) and (2). [§63.11094(g)]
    - a) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [§63.11094(g)(1)]
    - b) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11085(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [§63.11094(g)(2)]
  - 11) The permittee shall maintain these records on site for five years.
  - 12) The permittee shall immediately make such records available to any Department of Natural Resources' personnel upon request.

**Reporting:**

- 1) *Notification of Compliance Status.* The permittee must submit a Notification of Compliance Status as specified in §63.9(h). [§63.11093(b)]
- 2) *Notification of Performance Test.* The permittee must submit a Notification of Performance Test, as specified in §63.9(e), prior to initiating testing required by §63.11092(a) or §63.11092(b). [§63.11093(c)]
- 3) The permittee must submit additional notifications specified in §63.9, as applicable. [§63.11093(d)]
- 4) The permittee shall include in a semiannual compliance report to the Administrator the following information, as applicable: [§63.11095(a)]
  - a) For loading racks, each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility. [§63.11095(a)(2)]
  - b) For equipment leak inspections, the number of equipment leaks not repaired within 15 days after detection. [§63.11095(a)(3)]

- 5) The permittee shall submit an excess emissions report to the Administrator at the time the semiannual compliance report is submitted. Excess emissions events under 40 CFR Part 63 Subpart BBBBBB, and the information to be included in the excess emissions report, are specified in §63.11095(b)(1) through (5). [§63.11095(b)]
  - a) Each instance of a non-vapor-tight gasoline cargo tank loading at the facility in which the permittee 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. [§63.11095(b)(1)]
  - b) 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 §63.11094(b). [§63.11095(b)(2)]
  - c) Each exceedance or failure to maintain, as appropriate, the monitored operating parameter value determined under §63.11092(b). 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. [§63.11095(b)(3)]
  - d) 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: [§63.11095(b)(5)]
    - i) The date on which the leak was detected; [§63.11095(b)(5)(i)]
    - ii) The date of each attempt to repair the leak; [§63.11095(b)(5)(ii)]
    - iii) The reasons for the delay of repair; and [§63.11095(b)(5)(iii)]
    - iv) The date of successful repair. [§63.11095(b)(5)(iv)]
- 6) The permittee 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 the permittee during a malfunction of an affected source to minimize emissions in accordance with §63.11085(a), including actions taken to correct a malfunction. The report may be submitted as a part of the semiannual compliance report, if one is required. [§63.11095(d)]
- 7) The permittee shall report any deviations from the requirements of this permit condition in the annual compliance certification required by Section V of this permit.

<b>PERMIT CONDITION 008</b>		
10 CSR 10-6.075 Maximum Achievable Control Technology 40 CFR Part 63 Subpart BBBBBB – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities		
Emission Unit	Description	Construction Date
EP-03	Tank #3: Gasoline, 2,368,000 Gallons, Internal Floating Roof, Mechanical Shoe	1970
EP-05	Tank #1: Gasoline, 3,360,000 Gallons, Internal Floating Roof, Double Wiper Seal	1970
EP-07	Tank #2: Gasoline, 2,310,000 Gallons, Internal Floating Roof, Mechanical Shoe	1970
EP-08	Tank #6: Gasoline, 3,360,000 Gallons, Internal Floating Roof, Mechanical Shoe	Prior to June 1973
EP-09	Tank #5: Gasoline, 3,360,000 Gallons, Internal Floating Roof, Mechanical Shoe	1970

**Operational Limitations:**

- 1) The permittee 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. [§63.11085(a)]
- 2) The permittee shall equip each storage vessel with a fixed roof in combination with an internal floating roof meeting the following specifications: [§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. [§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: [§60.112b(a)(1)(ii)]
    - i) 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. [§60.112b(a)(1)(ii)(B)]
    - ii) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof. [§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.  
[§60.112b(a)(1)(iii)]

**General Provisions:**

The permittee shall comply with the General Provisions that apply to the facility in Table 3 to MACT BBBBBB. [§63.11098]

**Monitoring:**

- 1) The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.  
[§60.113b(a)(1)]
- 2) For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, the permittee shall 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 permittee 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 §60.113b(a)(2) cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible. [§60.113b(a)(2)]
- 3) For vessels equipped with a double-seal system as specified in §60.112b(a)(1)(ii)(B):  
[§60.113b(a)(3)]
  - a) The permittee shall visually inspect the vessel as specified in §60.113b(a)(4) at least every 5 years; or [§60.113b(a)(3)(i)]
    - i) The permit shall 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 permittee shall repair the items as necessary so that none of the conditions specified in §60.113b(a)(4) 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 §60.113b(a)(2) and (a)(3)(ii) and at intervals no greater than 5 years in the case of vessels specified in §60.113b(a)(3)(i). [§60.113b(a)(4)]
  - b) The permittee shall visually inspect the vessel as specified in §60.113b(a)(2).  
[§60.113b(a)(3)(ii)]

**Recordkeeping:**

- 1) The permittee shall furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(1) and §60.113b(a)(1). This report shall be an attachment to the notification required by §60.7(a)(3). [§60.115b(a)(1)]
- 2) The permittee shall keep a record of each inspection performed as required by §60.113b(a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the 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). [§60.115b(a)(2)]
- 3) If any of the conditions described in §60.113b(a)(2) are detected during the annual visual inspection required by §60.113b(a)(2), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made. [§60.115b(a)(3)]
- 4) After each inspection required by §60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in §60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of §60.112b(a)(1) or §60.113b(a)(3) and list each repair made. [§60.115b(a)(4)]
- 5) The permittee shall keep records affected source under 40 CFR Part 63 Subpart BBBBBB as specified in §63.11094(g)(1) and (2). [§63.11094(g)]
  - a) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [§63.11094(g)(1)]
  - b) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11085(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [§63.11094(g)(2)]
- 6) The permittee shall maintain these records on site for five years.
- 7) The permittee shall immediately make such records available to any Department of Natural Resources' personnel upon request.

**Reporting:**

- 1) *Notification of Compliance Status.* The permittee must submit a Notification of Compliance Status as specified in §63.9(h). [§63.11093(b)]
- 2) The permittee must submit additional notifications specified in §63.9, as applicable. [§63.11093(d)]
- 3) The permittee shall notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by §60.113b(a)(1) and (a)(4) to afford the Administrator the opportunity to have an observer present. If the inspection required by §60.113b(a)(4) is not planned and the permittee could not have known about the inspection 30 days in advance or refilling the tank, the permittee shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling. [§60.113b(a)(5)]
- 4) If any of the conditions described in §60.113b(a)(2) are detected during the annual visual inspection required by §60.113b(a)(2), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made. [§60.115b(a)(3)]

- 5) After each inspection required by §60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in §60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of §61.112b(a)(1) or §60.113b(a)(3) and list each repair made. [§60.115b(a)(4)]
- 6) The permittee 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 the permittee during a malfunction of an affected source to minimize emissions in accordance with §63.11085(a), including actions taken to correct a malfunction. The report may be submitted as a part of the semiannual compliance report, if one is required. [§63.11095(d)]
- 7) The permittee shall report any deviations from the requirements of this permit condition in the annual compliance certification required by Section V of this permit.

## IV. Core Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR), Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect on the date of permit issuance. The following are only excerpts from the regulation or code, and are provided for summary purposes only.

### **10 CSR 10-6.045 Open Burning Requirements and St. Louis City Ordinance 68657 §16 Open Burning Restrictions**

- 1) No person shall cause, suffer, allow or permit the open burning of refuse.
- 2) No person shall conduct, cause or permit the conduct of a salvage operation by open burning.
- 3) No person shall conduct, cause or permit the disposal of trade waste by open burning.
- 4) No person shall cause or permit the open burning of leaves, trees or the byproducts therefrom, grass, or other vegetation.
- 5) It shall be prima-facie evidence that the person who owns or controls property on which open burning occurs, has caused or permitted said open burning.

### **10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions**

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
  - a) Name and location of installation;
  - b) Name and telephone number of person responsible for the installation;
  - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
  - d) Identity of the equipment causing the excess emissions;
  - e) Time and duration of the period of excess emissions;
  - f) Cause of the excess emissions;
  - g) Air pollutants involved;
  - h) Estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
  - i) Measures taken to mitigate the extent and duration of the excess emissions; and
  - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information to the director in writing at least ten days prior to any maintenance, start-up or shutdown activity which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, notice shall be given as soon as practicable prior to the activity.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.

- 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

#### **10 CSR 10-6.060 Construction Permits Required**

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

#### **10 CSR 10-6.065 Operating Permits**

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. The permittee shall retain the most current operating permit issued to this installation on-site. The permittee shall make such permit available within a reasonable period of time to any Missouri Department of Natural Resources personnel upon request.

#### **10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61 Subpart M National Emission Standard for Asbestos**

The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.

#### **10 CSR 10-6.110 Reporting of Emission Data, Emission Fees and Process Information**

- 1) The permittee shall submit a Full Emissions Report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.
- 2) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 3) The permittee shall submit full EIQ's per the schedule in the rule. In the interim years the installation may submit a Reduced Reporting Form; however, if the installation's emissions increase or decrease by more than five tons when compared to their last submitted full EIQ, the installation shall submit a full EIQ rather than a Reduced Reporting Form.
- 4) In addition to the EIQ submittal schedule outlined above, any permit issued under 10 CSR 10-6.060 section (5) triggers a requirement that a full EIQ be submitted in the first full calendar year after the permitted equipment initially operates.

#### **10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential**

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

### **10 CSR 10-6.150 Circumvention**

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

### **10 CSR 10-6.165 Restriction of Emission of Odors**

#### **This is a State Only permit requirement.**

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

### **10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin**

#### **Emission Limitation:**

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
- 3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
  - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
  - b) Paving or frequent cleaning of roads, driveways and parking lots;
  - c) Application of dust-free surfaces;
  - d) Application of water; and
  - e) Planting and maintenance of vegetative ground cover.

#### **Monitoring:**

The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.

The permittee shall maintain the following monitoring schedule:

- 1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
- 2) Should no violation of this regulation be observed during this period then-
  - a) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
  - b) If a violation is noted, monitoring reverts to weekly.
  - c) Should no violation of this regulation be observed during this period then-
    - i) The permittee may observe once per month.

- ii) If a violation is noted, monitoring reverts to weekly.
- 3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

**Recordkeeping:**

The permittee shall document all readings on Attachment A, or its equivalent, noting the following:

- 1) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
- 2) Whether equipment malfunctions contributed to an exceedance.
- 3) Any violations and any corrective actions undertaken to correct the violation.

**10 CSR 10-6.180 Measurement of Emissions of Air Contaminants**

- 1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

**10 CSR 10-6.250 Asbestos Abatement Projects**

**Certification, Accreditation, and Business Exemption Requirements**

**This is a State Only permit requirement.**

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees.

**10 CSR 10-6.280 Compliance Monitoring Usage**

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
  - a) Monitoring methods outlined in 40 CFR Part 64;
  - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Any other monitoring methods approved by the director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at an installation:
  - a) Monitoring methods outlined in 40 CFR Part 64;

- b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
- a) Applicable monitoring or testing methods, cited in:
    - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
    - ii) 10 CSR 10-6.040, "Reference Methods";
    - iii) 10 CSR 10-6.070, "New Source Performance Standards";
    - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
  - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

#### **10 CSR 10-5.040 Use of Fuel in Hand-Fired Equipment Prohibited**

No owner or operator shall operate applicable hand-fired fuel burning equipment unless the owner or operator meets the conditions set forth in 10 CSR 10-5.040. This regulation shall apply to all hand-fired fuel-burning equipment at commercial facilities including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, nor to fires used for recreational purpose, nor to fires used solely for the preparation of food by barbecuing or to other equipment exempted under 10 CSR 10-5.040. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

#### **10 CSR 10-5.060 Refuse Not to be Burned in Fuel Burning Installations**

(Rescinded on February 11, 1979, Contained in State Implementation Plan)

No person shall burn or cause or permit the burning of refuse in any installation which is designed for the primary purpose of burning fuel.

#### **40 CFR Part 82 Protection of Stratospheric Ozone (Title VI)**

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR §82.106.
  - b) The placement of the required warning statement must comply with the requirements of 40 CFR §82.108.
  - c) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR §82.110.
  - d) No person may modify, remove, or interfere with the required warning statement except as described in 40 CFR §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B of 40 CFR Part 82:
  - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices described in 40 CFR §82.156.

- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment described in 40 CFR §82.158.
  - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR §82.161.
  - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the record keeping requirements of 40 CFR §82.166. ("MVAC-like" appliance as defined at 40 CFR §82.152).
  - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR §82.156.
  - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
  - 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements contained in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
  - 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82.*

## V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

### Permit Duration

#### 10 CSR 10-6.065, §(4)(C)1, §(5)(C)1.B, §(4)(E)2.C

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed. If a timely and complete application for a permit renewal is submitted, but the Air Pollution Control Program fails to take final action to issue or deny the renewal permit before the end of the term of this permit, this permit shall not expire until the renewal permit is issued or denied.

### General Record Keeping and Reporting Requirements

#### 10 CSR 10-6.065, §(4)(C)1 and §(5)(C)1.C

##### 1) Record Keeping

- a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
- b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made available within a reasonable period of time to any Missouri Department of Natural Resources' personnel upon request.

##### 2) Reporting

- a) All reports shall be submitted to the Air Pollution Control Program, Compliance and Enforcement Section, P. O. Box 176, Jefferson City, MO 65102 and [AirComplianceReporting@dnr.mo.gov](mailto:AirComplianceReporting@dnr.mo.gov).
- b) The permittee shall submit a report of all required monitoring by:
  - i) April 1st for monitoring which covers the January through December time period.
  - ii) Exception. Monitoring requirements which require reporting more frequently than annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
- c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit.
- d) Submit supplemental reports as required or as needed. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
  - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (5)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of

emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

- ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's annual report shall be reported on the schedule specified in this permit.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

### **Risk Management Plan Under Section 112(r)**

#### **10 CSR 10-6.065 §(4)(C)1 and §(5)(C)1.D**

If the installation is required to develop and register a risk management plan pursuant to Section 112(R) of the Act, the permittee will verify that it has complied with the requirement to register the plan.

### **General Requirements**

#### **10 CSR 10-6.065(4)(C)1.A**

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted under this rule.
- 6) Failure to comply with the limitations and conditions that qualify the installation for an Intermediate permit make the installation subject to the provisions of 10 CSR 10-6.065(5) and enforcement action for operating without a valid part 70 operating permit.

## **Reasonably Anticipated Operating Scenarios**

### **10 CSR 10-6.065(4)(C)1.C**

There are no reasonably anticipated operating scenarios.

## **Compliance Requirements**

### **10 CSR 10-6.065, §(4)(B)4; §(4)(C)1, §(5)(C)3.B; and §(5)(C)3.D; and §(4)(C)3 and §(5)(C)3.E.(I) – (III) and (V) – (VI)**

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
  - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
  - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
  - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 and [AirComplianceReporting@dnr.mo.gov](mailto:AirComplianceReporting@dnr.mo.gov). All deviations and exceedances must be included in the compliance certifications. The compliance certification shall include the following:
  - a) The identification of each term or condition of the permit that is the basis of the certification;
  - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
  - c) Whether compliance was continuous or intermittent;
  - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
  - e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

## **Emergency Provisions**

### **10 CSR 10-6.065, §(4)(C)1 and §(5)(C)7**

- 1) An emergency or upset as defined in 10 CSR 10-6.065(5)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
  - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
  - b) That the installation was being operated properly,
  - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
  - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

## **Off-Permit Changes**

### **10 CSR 10-6.065(4)(C)5**

- 1) Except as noted below, the permittee may make any change in its permitted installation's operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Off-permit changes shall be subject to the following requirements and restrictions:
  - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is a Title I modification; Please Note: Changes at the installation which affect the emission limitation(s) classifying the installation as an intermediate source (add additional equipment to the record keeping requirements, increase the emissions above major source level) do not qualify for off-permit changes.
  - b) The permittee must provide contemporaneous written notice of the change to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 and [AirComplianceReporting@dnr.mo.gov](mailto:AirComplianceReporting@dnr.mo.gov), as well as EPA Region 7, 11201 Renner Blvd., Lenexa, KS 66219. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change; and
  - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes.

## **Responsible Official**

### **10 CSR 10-6.020(2)(R)34**

The application utilized in the preparation of this permit was signed by Michael Bramell. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program

of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

### **Reopening-Permit for Cause**

#### **10 CSR 10-6.065 §(4)(E)4 and §(5)(E)6.A(III)(a)-(c)**

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MoDNR) or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 2) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
  - a) The permit has a remaining term of less than three years;
  - b) The effective date of the requirement is later than the date on which the permit is due to expire;  
or
  - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 3) MoDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

### **Statement of Basis**

#### **10 CSR 10-6.065 §(4)(E)1.A and §(5)(E)1.C**

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

## **VI. Attachments**

Attachments follow.



**Attachment B**  
 Tanks VOC Tracking Record

Company Name: *J.D. Streett & Company, Inc.*  
 Tank(s) Type: *Internal Floating Roof*

Page: *1 of 9*  
 Emissions: *Working Losses*

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Tank ID	Q	D	C <sub>S</sub>	W <sub>L</sub>	N <sub>C</sub>	F <sub>C</sub>	L <sub>w</sub>
	Monthly Throughput (bbl) <sup>1</sup>	Tank Diameter (ft)	Clingage Factor <sup>2</sup>	Average Organic Liquid Density <sup>3</sup> (lb/gal)	Number of Support Columns	Effective Column Diameter (ft.)	Working Loss <sup>4</sup> (lb)
EP-03 (Tank 3)							
EP-04 (Tank 4)							
EP-05 (Tank 1)							
EP-07 (Tank 2)							
EP-08 (Tank 6)							
EP-09 (Tank 5)							
<b>Total VOC Emissions from Working Loss<sup>5</sup> (lb)</b>							
<b>Total VOC Emissions from Working Loss<sup>6</sup> (ton)</b>							

<sup>1</sup> If Throughput is given in gallons: [Throughput, bbl] = [Throughput, gal] / [42 gal/bbl]

<sup>2</sup> C<sub>S</sub> from AP-42 Chapter 7.1 Organic Liquid Storage Tanks, Table 7.1-10. Average Clingage Factors.

<sup>3</sup> W<sub>L</sub> can be obtained from AP-42 Chapter 7.1 Organic Liquid Storage Tanks, Table 7.1-2. Properties of Selected Petroleum Liquids and Satey Data Sheets.

$$L_w = \frac{0.943 \frac{1,000 \text{ ft}^3 \text{ gal}}{\text{bbl}^2} \times Q \times C_S \times W_L}{D} \times \left(1 - \frac{N_C F_C}{D}\right)$$

<sup>5</sup> [Total VOC Emissions from Working Loss, lb] = [sum of all Tanks Working Loss Emissions, lb].

<sup>6</sup> [Total VOC Emissions from Working Loss, ton] = [0.005 tons/lb] x [Total VOC Emissions from Working Loss, lb].

**Attachment B (continued)**

Tanks VOC Tracking Record

Company Name: *J.D. Streett & Company, Inc.*  
 Tank(s) Type: *Internal Floating Roof*

Page: *2 of 9*  
 Emissions: *Standing Losses*

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Tank ID	M <sub>V</sub> Vapor Molecular Weight <sup>7</sup> (lb/lb-mol)	D Tank Diameter (ft)	P <sub>V<sub>A</sub></sub> True Vapor Pressure of Stored Liquid <sup>8</sup> (psia)	K <sub>C</sub> Product Factor <sup>9</sup>	P* Vapor Pressure Function <sup>10</sup> (psia)	K <sub>Ra</sub> Rim Seal Loss Factor <sup>11</sup> (lb-mol/ft-month)	F <sub>F</sub> Total Deck Fitting Loss Factor <sup>12</sup> (lb-mol/ft-month)
EP-03 (Tank 3)							
EP-04 (Tank 4)							
EP-05 (Tank 1)							
EP-07 (Tank 2)							
EP-08 (Tank 6)							
EP-09 (Tank 5)							

<sup>7</sup> M<sub>V</sub> from AP-42 Chapter 7.1 Organic Liquid Storage Tanks, Table 7.1-2. Properties of Selected Petroleum Liquids and Satey Data Sheets provided by the installation.

$$^8 P_{VA} = \exp\left[A - \left(\frac{B}{T_{LA}}\right)\right]$$

Note: See Attachment F, Equation (5), Equation (9), and Equation (10) for T<sub>LA</sub>, A, and B, respectively.

<sup>9</sup> K<sub>C</sub> = 0.4 for crude oils and 1.0 for all other organic liquids. Values obtained from AP-42 Chapter 7.1 Organic Liquid Storage Tanks.

$$^{10} P^* = \left(\frac{P_{VA}}{P_A}\right) / \left(1 + \left[1 - \frac{P_{VA}}{P_A}\right]^{0.5}\right)^2, \text{ where } P_A = 14.23 \text{ psia (AP-42 Chapter 7.1 Organic Liquid Storage Tanks, Table 7.1-7 Meteorological Data for Selected Locations).}$$

<sup>11</sup> K<sub>Ra</sub> obtained from AP-42 Chapter 7.1 Organic Liquid Storage Tanks, Table 7.1-8 Rim-Seal Loss Factors for Floating Roof Tanks.

1. Welded Tank with Mechanical Shoe Primary Seal = 5.8 lb mol/ft. year. (This value must be divided by 12 to account for monthly losses).
2. Welded Tank with Mechanical Shoe Primary, Rim Mounted Secondary = 0.6 lb mol/ft. year. (This value must be divided by 12 to account for monthly losses).

<sup>12</sup> F<sub>F</sub> = [(N<sub>F1</sub>K<sub>F1</sub>) + (N<sub>F2</sub>K<sub>F2</sub>) + ... + (N<sub>Fn</sub>K<sub>Fn</sub>)], where:

1. F<sub>n</sub> = total number of fittings.
2. N<sub>Fi</sub> = number of deck fittings of a particular type.
3. K<sub>Fi</sub> = deck fitting loss factor for a particular type fitting (Values from AP-42 Chapter 7.1 Organic Liquid Storage Tanks, Table 7.1-12 Deck-Fitting Loss Factors).

### Attachment B (continued)

#### Tanks VOC Tracking Record

Company Name: *J.D. Streett & Company, Inc.*  
 Tank(s) Type: *Internal Floating Roof*

Page: *3 of 9*  
 Emissions: *Standing Losses*

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Tank ID	K <sub>D</sub> Deck Seam Loss per Unit Seam Length Factor (lb-mol/ft. month) <sup>13</sup>	S <sub>D</sub> Seam Length Factor <sup>14</sup>	L <sub>R</sub> Rim Seal Loss <sup>15</sup> (lb)	L <sub>F</sub> Deck Fitting Loss <sup>16</sup> (lb)	L <sub>D</sub> Deck Seam Loss <sup>17</sup> (lb)	L <sub>S</sub> Standing Loss <sup>18</sup> (lb)
EP-03 (Tank 3)						
EP-04 (Tank 4)						
EP-05 (Tank 1)						
EP-07 (Tank 2)						
EP-08 (Tank 6)						
EP-09 (Tank 5)						
<b>Total VOC Emissions from Standing Loss<sup>19</sup> (lb)</b>						
<b>Total VOC Emissions from Standing Loss<sup>20</sup> (ton)</b>						

<sup>13</sup> K<sub>D</sub> (Values obtained from AP-42 Chapter 7.1 Organic Liquid Storage Tanks)

1. 0.0 for welded decks.
2. 0.14 for bolted decks (This value is lb-mol/ft.-yr. and must be divided by 12 to account for monthly losses).

<sup>14</sup> S<sub>D</sub> obtained from AP-42 Chapter 7.1 Organic Liquid Storage Tanks, Table 7.1-16 Deck Seam Length Factors for Typical Deck Constructions for Internal Floating Roof Tanks.

<sup>15</sup> L<sub>R</sub> = K<sub>Ra</sub> x D x P\* x M<sub>V</sub> x K<sub>C</sub>

<sup>16</sup> L<sub>F</sub> = F<sub>F</sub> x P\* x M<sub>V</sub> x K<sub>C</sub>

<sup>17</sup> L<sub>D</sub> = K<sub>D</sub> x S<sub>D</sub> x D<sup>2</sup> x P\* x M<sub>V</sub> x K<sub>C</sub>

<sup>18</sup> L<sub>S</sub> = L<sub>R</sub> + L<sub>F</sub> + L<sub>D</sub>

<sup>19</sup> [Total VOC Emissions from Standing Loss, lb] = [sum of all Tanks Standing Loss Emissions, lb].

<sup>20</sup> [Total VOC Emissions from Standing Loss, ton] = [0.005 tons/lb] x [Total VOC Emissions from Working Loss, lb].

### Attachment B (continued)

#### Tanks VOC Tracking Record

Company Name: *J.D. Streett & Company, Inc.*  
 Tank(s) Type: *Fixed Roof*

Page: *4 of 9*  
 Emissions: *Working Losses*

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Tank ID	Q	K <sub>N</sub>	K <sub>P</sub>	W <sub>V</sub>	K <sub>B</sub>	L <sub>W</sub>
	Monthly Throughput (bbl) <sup>21</sup>	Turnover (Saturation) Factor <sup>22</sup>	Product Factor <sup>23</sup>	Vapor Density <sup>24</sup> (lb/ft <sup>3</sup> )	Vent Setting Correction Factor <sup>25</sup>	Working Loss <sup>26</sup> (lb)
EP-06 (Tank 7)						
EP-10 (Tank 8)						
EP-11 (Tank 9)						
EP-20 (Tank 17)						
EP-21 (Tank 18)						
<b>Total VOC Emissions from Working Loss<sup>27</sup> (lb)</b>						
<b>Total VOC Emissions from Working Loss<sup>28</sup> (ton)</b>						

<sup>21</sup> If Throughput is given in gallons: [Throughput, bbl] = [Throughput, gal] / [42 gal/bbl]

<sup>22</sup>  $K_N = (180 + N) / 6N$ , where: N = number of turnovers per year. Note: This can be obtained by using the turnovers within the current, consecutive 12-month period.

<sup>23</sup>  $K_P = 0.75$  for crude oils and 1.0 for all other organic liquids, according to AP-42 Chapter 7.1 Organic Liquid Storage Tanks.

<sup>24</sup>  $W_V = (M_V P_{VA}) / (10.731 \frac{psia \cdot ft^3}{lb \cdot mol \cdot ^\circ R} T_V)$ , Note: See the Standing Loss Calculations for  $M_V$ ,  $P_{VA}$ , and  $T_V$  values for Tanks 787, 1444, and 6028.

<sup>25</sup>  $K_B = 1.0$  when vent setting range is less than or equal to  $\pm 0.03$  psig (AP-42 Chapter 7.1 Organic Liquid Storage Tanks).

<sup>26</sup>  $L_W = 5.614 \cdot ft^3/bbl \times Q \times K_N \times K_P \times W_V \times K_B$

<sup>27</sup> [Total VOC Emissions from Working Loss, lb] = [sum of all Tanks Working Loss Emissions, lb].

<sup>28</sup> [Total VOC Emissions from Working Loss, ton] = [0.005 tons/lb] x [Total VOC Emissions from Working Loss, lb].

**Attachment B (continued)**

Tanks VOC Tracking Record

Company Name: *J.D. Streett & Company, Inc.*  
 Tank(s) Type: *Fixed Roof*

Page: *5 of 9*  
 Emissions: *Standing Losses*

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Tank ID	D	H <sub>S</sub>	M <sub>V</sub>	H <sub>VO</sub>	P <sub>VA</sub>	P <sub>A</sub>	T <sub>V</sub>	ΔT <sub>V</sub>
	Tank Diameter (ft)	Tank Shell Height (ft)	Vapor Molecular Weight <sup>29</sup> (lb/lb/mol)	Average Height of Vapor Space <sup>30</sup> (ft)	True Vapor Pressure of Stored Liquid <sup>31</sup> (psia)	Atmospheric Pressure <sup>32</sup> (psia)	Average Vapor Temperature <sup>33</sup> (°R)	Average Daily Vapor Temperature Range <sup>34</sup> (°R)
EP-06 (Tank 7)								
EP-10 (Tank 8)								
EP-11 (Tank 9)								
EP-20 (Tank 17)								
EP-21 (Tank 18)								

<sup>29</sup> M<sub>V</sub> can be obtained from AP-42 Chapter 7.1 Organic Liquid Storage Tanks, Table 7.1-2. Properties of Selected Petroleum Liquids and Satey Data Sheets.

<sup>30</sup> H<sub>VO</sub> = H<sub>S</sub> - H<sub>L</sub> + H<sub>RO</sub>, where:

1. H<sub>S</sub> = tank shell height, ft.
2. H<sub>L</sub> = liquid height, ft. [ ½ x (Maximum Liquid Height, ft. - Minimum Liquid Height, ft.) + Minimum Liquid Height, ft.]
3. H<sub>RO</sub> = roof outage, ft. [Cone Roof: (1/3) x (0.0625) x (D/2, ft.)]

<sup>31</sup> P<sub>VA</sub> = exp[A - (B/T<sub>LA</sub>) ], where:

1. A = constant in the vapor pressure equation, dimensionless - see AP-42 Chapter 7.1, Table 7.1-2. If not available, see Attachment F, Equation (9).
2. B = constant in the vapor pressure equation, °R - see AP-42 Chapter 7.1, Table 7.1-2. If not available, see Attachment F, Equation (10).
3. T<sub>LA</sub> = average daily liquid surface temperature, °R - see Attachment F, Equation (5).

<sup>32</sup> P<sub>A</sub> = 14.23 psia according to AP-42 Chapter 7.1 Organic Liquid Storage Tanks, Table 7.1-7 Meteorological Data for Selected Locations.

<sup>33</sup> T<sub>V</sub> - See Attachment F, Equation (1).

<sup>34</sup> ΔT<sub>V</sub> - See Attachment F, Equation (8).

### Attachment B (continued)

#### Tanks VOC Tracking Record

Company Name: *J.D. Streett & Company, Inc.*  
Tank(s) Type: *Fixed Roof*

Page: *6 of 9*  
Emissions: *Standing Losses*

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Tank ID	$\Delta P_V$	$\Delta P_B$	$T_{LA}$	$V_V$	$W_V$	$K_E$	$K_S$	$L_S$
	Average Daily Vapor Pressure Range <sup>35</sup> (psi)	Breather Vent Setting Range <sup>36</sup> (psig)	Average Daily Liquid Surface Temperature <sup>37</sup> (°R)	Vapor Space Volume <sup>38</sup> (ft <sup>3</sup> )	Stock Vapor Density <sup>39</sup> (lb/ft <sup>3</sup> )	Vapor Space Expansion Factor <sup>40</sup> (per day)	Vented Vapor Saturation Factor <sup>41</sup>	Standing Loss <sup>42</sup> (lb)
EP-06 (Tank 7)								
EP-10 (Tank 8)								
EP-11 (Tank 9)								
EP-20 (Tank 17)								
EP-21 (Tank 18)								
<b>Total VOC Emissions from Standing Loss (lb)</b>								
<b>Total VOC Emissions from Standing Loss (ton)</b>								

<sup>35</sup> $\Delta P_V = P_{VX} - P_{VN}$ , where:

1.  $P_{VX}$  = vapor pressure at the average daily maximum liquid surface temperature, psia - see Attachment F, Equation (3).
2.  $P_{VN}$  = vapor pressure at the average daily minimum liquid surface temperature, psia - see Attachment F, Equation (4).

<sup>36</sup> $\Delta P_B = P_{BP} - P_{BV}$ , where:

3.  $P_{BP}$  = breather vent pressure setting, psig (assume 0.03 if no specific information available).
4.  $P_{BV}$  = breather vent vacuum setting, psig (assume -0.03 if no specific information available).

<sup>37</sup>  $T_{LA}$  - See Attachment F, Equation (5).

<sup>38</sup>  $V_V = (\pi D^2 / 4) H_{V0}$

<sup>39</sup>  $W_V = (M_V P_{VA}) / \left( 10.731 \frac{\text{psia ft}^3}{\text{lb mol } ^\circ\text{R}} T_V \right)$

<sup>40</sup>  $K_E = \Delta T_V / T_{LA} + (\Delta P_V - \Delta P_B) / (P_A - P_{VA})$ , where  $(0 < K_E \leq 1)$

<sup>41</sup>  $K_S = 1 / (1 + 0.053 P_{VA} H_{V0})$

<sup>42</sup>  $L_S = [\text{Days in Current Month}] \times [V_V] \times [W_V] \times [K_E] \times [K_S]$

**Attachment B (continued)**

Tanks VOC Tracking Record

Company Name: *J.D. Streett & Company, Inc.*  
Tank(s) Type: *Additive Tanks: Fixed Roof*

Page: *7 of 9*  
Emissions: *Working Losses*

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Tank ID	Q	K <sub>N</sub>	K <sub>P</sub>	W <sub>V</sub>	K <sub>B</sub>	L <sub>W</sub>
	Monthly Throughput (bbl) <sup>43</sup>	Turnover (Saturation) Factor <sup>44</sup>	Product Factor <sup>45</sup>	Vapor Density <sup>46</sup> (lb/ft <sup>3</sup> )	Vent Setting Correction Factor <sup>47</sup>	Working Loss <sup>48</sup> (lb)
EP-12 (Tank 10)						
EP-13 (Tank 11)						
EP-14 (Tank 13)						
EP-15 (Tank 12)						
EP-18 (Tank 15)						
EP-19 (Tank 16)						
<b>Total VOC Emissions from Working Loss<sup>49</sup> (lb)</b>						
<b>Total VOC Emissions from Working Loss<sup>50</sup> (ton)</b>						

<sup>43</sup> If Throughput is given in gallons: [Throughput, bbl] = [Throughput, gal] / [42 gal/bbl]

<sup>44</sup>  $K_N = (180 + N) / 6N$ , where: N = number of turnovers per year. Note: This can be obtained by using the turnovers within the current, consecutive 12-month period.

<sup>45</sup>  $K_P = 0.75$  for crude oils and 1.0 for all other organic liquids, according to AP-42 Chapter 7.1 Organic Liquid Storage Tanks.

<sup>46</sup>  $W_V = (M_V P_{VA}) / (10.731 \frac{psia \cdot ft^3}{lb \cdot mol \cdot ^\circ R} T_V)$ , Note: See the Standing Loss Calculations for  $M_V$ ,  $P_{VA}$ , and  $T_V$  values for Tanks 787, 1444, and 6028.

<sup>47</sup>  $K_B = 1.0$  when vent setting range is less than or equal to  $\pm 0.03$  psig (AP-42 Chapter 7.1 Organic Liquid Storage Tanks).

<sup>48</sup>  $L_W = 5.614, ft^3/bbl \times Q \times K_N \times K_P \times W_V \times K_B$

<sup>49</sup> [Total VOC Emissions from Working Loss, lb] = [sum of all Tanks Working Loss Emissions, lb].

<sup>50</sup> [Total VOC Emissions from Working Loss, ton] = [0.005 tons/lb] x [Total VOC Emissions from Working Loss, lb].

### Attachment B (continued)

#### Tanks VOC Tracking Record

Company Name: *J.D. Streett & Company, Inc.*  
Tank(s) Type: *Additive Tanks: Fixed Roof*

Page: *8 of 9*  
Emissions: *Standing Losses*

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Tank ID	D	H <sub>S</sub> or L	D <sub>E</sub>	M <sub>V</sub>	H <sub>VO</sub>	P <sub>VA</sub>	P <sub>A</sub>	T <sub>V</sub>	ΔT <sub>V</sub>
	Tank Diameter (ft)	Tank Shell Height or Length <sup>51</sup> (ft)	Effective Diameter <sup>52</sup> (ft)	Vapor Molecular Weight <sup>53</sup> (lb/lb/mol)	Average Height of Vapor Space <sup>54</sup> (ft)	True Vapor Pressure of Stored Liquid <sup>55</sup> (psia)	Atmospheric Pressure <sup>56</sup> (psia)	Average Vapor Temperature <sup>57</sup> (°R)	Average Daily Vapor Temperature Range <sup>58</sup> (°R)
EP-12 (Tank 10)									
EP-13 (Tank 11)									
EP-14 (Tank 13)									
EP-15 (Tank 12)									
EP-18 (Tank 15)									
EP-19 (Tank 16)									

<sup>51</sup> Length values for Horizontal Tanks (Tanks 10, 70, 110, 130, and 160) and Height values for Vertical Tanks (Tanks 21,120, 132, and 133).

<sup>52</sup>  $D_E = \sqrt{L \times D / (\pi/4)}$ , Note: This only applies to Horizontal Tanks.

<sup>53</sup> M<sub>V</sub> can be obtained from AP-42 Chapter 7.1 Organic Liquid Storage Tanks, Table 7.1-2. Properties of Selected Petroleum Liquids and Satey Data Sheets.

<sup>54</sup> H<sub>VO</sub> = H<sub>S</sub> - H<sub>L</sub> + H<sub>RO</sub>, for Vertical Tanks., and H<sub>VO</sub> = (1/2) × (π × D/4), for Horizontal Tanks.

1. H<sub>S</sub> = tank shell height, ft.

2. H<sub>L</sub> = liquid height, ft. [ ½ x (Maximum Liquid Height, ft. - Minimum Liquid Height, ft.) + Minimum Liquid Height, ft.]

3. H<sub>RO</sub> = roof outage, ft. [Cone Roof: (1/3) x (0.0625) x (D/2, ft.)]

<sup>55</sup> P<sub>VA</sub> = exp[A - (B/T<sub>LA</sub>) ], where:

1. A = constant in the vapor pressure equation, dimensionless - see AP-42 Chapter 7.1, Table 7.1-2. If not available, see Attachment F, Equation (9).

2. B = constant in the vapor pressure equation, °R - see AP-42 Chapter 7.1, Table 7.1-2. If not available, see Attachment F, Equation (10).

3. T<sub>LA</sub> = average daily liquid surface temperature, °R - see Attachment F, Equation (5).

<sup>56</sup> P<sub>A</sub> = 14.23 psia according to AP-42 Chapter 7.1 Organic Liquid Storage Tanks, Table 7.1-7 Meteorological Data for Selected Locations.

<sup>57</sup> T<sub>V</sub> - See Attachment F, Equation (1).

<sup>58</sup> ΔT<sub>V</sub> - See Attachment F, Equation (8).

**Attachment B (continued)**

Tanks VOC Tracking Record

Company Name: *J.D. Streett & Company, Inc.*  
 Tank(s) Type: *Additive Tanks: Fixed Roof*

Page: *9 of 9*  
 Emissions: *Standing Losses*

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Tank ID	$\Delta P_V$	$\Delta P_B$	$T_{LA}$	$V_V$	$W_V$	$K_E$	$K_S$	$L_S$
	Average Daily Vapor Pressure Range <sup>59</sup> (psi)	Breather Vent Setting Range <sup>60</sup> (psig)	Average Daily Liquid Surface Temperature <sup>61</sup> (°R)	Vapor Space Volume <sup>62</sup> (ft <sup>3</sup> )	Stock Vapor Density <sup>63</sup> (lb/ft <sup>3</sup> )	Vapor Space Expansion Factor <sup>64</sup> (per day)	Vented Vapor Saturation Factor <sup>65</sup>	Standing Loss <sup>66</sup> (lb)
EP-12 (Tank 10)								
EP-13 (Tank 11)								
EP-14 (Tank 13)								
EP-15 (Tank 12)								
EP-18 (Tank 15)								
EP-19 (Tank 16)								
<b>Total VOC Emissions from Standing Loss (lb)</b>								
<b>Total VOC Emissions from Standing Loss (ton)</b>								

<sup>59</sup>  $\Delta P_V = P_{VX} - P_{VN}$ , see Attachment F, Equation (3) and Equation (4) for  $P_{VX}$  and  $P_{VN}$ .

<sup>60</sup>  $\Delta P_B = P_{BP} - P_{BV}$ , where:

1.  $P_{BP}$  = breather vent pressure setting, psig (assume 0.03 if no specific information available).
2.  $P_{BV}$  = breather vent vacuum setting, psig (assume -0.03 if no specific information available).

<sup>61</sup>  $T_{LA}$  - See Attachment F, Equation (5).

<sup>62</sup>  $V_V = (\pi D^2 / 4) H_{VO}$ , Note: insert  $D_E$  for  $D$  when calculating Horizontal Tank Emissions.

<sup>63</sup>  $W_V = (M_V P_{VA}) / \left( 10.731 \frac{psia \text{ ft}^3}{lb \text{ mol} \cdot ^\circ R} T_V \right)$

<sup>64</sup>  $K_E = \Delta T_V / T_{LA} + (\Delta P_V - \Delta P_B) / (P_A - P_{VA})$ , where  $(0 < K_E \leq 1)$

<sup>65</sup>  $K_S = 1 / (1 + 0.053 P_{VA} H_{VO})$

<sup>66</sup>  $L_S = [\text{Days in Current Month}] \times [V_V] \times [W_V] \times [K_E] \times [K_S]$

### Attachment C

#### Roof Landing VOC Tracking Record

Company Name: *J.D. Streett & Company, Inc.*  
 Tank(s) Type: *Internal Floating Roof*

Page: *1 of 4*  
 Emissions: *Landing Losses*

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Reason For Landing (RVP Change, Maintenance, OOS, etc.)	Total Number of Tank Landings Performed <sup>67</sup>	Tank ID	Tank Type (IFR, EFR)	Start Time <sup>68</sup>	Initial Product <sup>69</sup>	Final Product <sup>70</sup>	End Time <sup>71</sup>	n <sub>d</sub>	D
								Total Time Tank Stands Idle (days)	Tank Diameter (ft)

<sup>67</sup> A total number of Tank Roof Landings conducted in Tanks 541, 785, 786, 843, and 1421 of 10 times or less annually indicates compliance with Permit Condition 001.

Note: Tank Landings for required inspections, maintenance, or cleaning shall not be included in this total.

<sup>68</sup> Include Date (MM/DD/YY) and Time (HH:MM). The start time is indicated when liquid comes out of contact with the floating roof.

<sup>69</sup> Include RVP and Product Type for Initial Product.

<sup>70</sup> If different than Initial Product, include RVP and Product Type. Otherwise, N/A.

<sup>71</sup> Include Date (MM/DD/YY) and Time (HH:MM). The end time is indicated when liquid comes into contact with floating roof.

**Attachment C (continued)**  
 Roof Landing VOC Tracking Record

Company Name: *J.D. Strett & Company, Inc.*  
 Tank(s) Type: *Internal Floating Roof*

Page: *2 of 4*  
 Emissions: *Landing Losses*

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Tank ID	Heel Type <sup>72</sup> : 1 - Full 2 - Partial 3 - Drain Dry	s	h <sub>l</sub>	h <sub>d</sub>	h <sub>p</sub>	h <sub>le</sub>	h <sub>v</sub>	V <sub>v</sub>	P <sub>VA</sub>
		Tank Bottom Slope (ft/ft)	Liquid Height (ft)	Deck Leg Height at the Tank Shell (ft)	Distance from Bottom of Shell to Liquid in Cone-Down Bottom (ft)	Effective Stock Liquid Height <sup>73</sup> (ft)	Height of Vapor Space <sup>74</sup> (ft)	Volume of Vapor Space <sup>75</sup> (ft <sup>3</sup> )	True Vapor Pressure of stock liquid <sup>76</sup> (psia)

<sup>72</sup> Full Liquid Heel (standing liquid across the entire bottom), Partial Heel (standing liquid only in/near a sump; clingage elsewhere), or Drain Dry (no standing liquid, only liquid is clingage).

<sup>73</sup> For:

1. Full Liquid Heel:  $h_{le} = (h_l + (s D/6))$
2. Partial Liquid Heel:  $h_{le} = \text{volume of heel, ft}^3 / (\pi D^2 / 4)$
3. Drain Dry:  $h_{le} = 0$
4. Flat Bottom:  $s = 0$ ,  $h_{le}$  is evaluated per the applicable case above.

Note: volume of heel, ft.<sup>3</sup> =  $(\pi D^2 / 12) \times (sD/2 - h_p)^3 / (sD/2)^2$

<sup>74</sup> For:

1. Full Liquid Heel:  $h_v = h_d - h_l$
2. Partial Liquid Heel:  $h_v = (h_d + (sD/6)) - [( \text{volume of heel, ft}^3 / (\pi D^2 / 4) ) + (0.01 \text{ in.} / 12 \text{ in. per ft.} ) ]$
3. Drain Dry:  $h_v = (h_d + (sD/6))$
4. Flat Bottom:  $h_v = h_d - h_l$

<sup>75</sup>  $V_v = h_v (\pi D^2 / 4)$

<sup>76</sup>  $P_{VA} = \exp[A - (B/T_{LA})]$ , For A and B use AP-42 Chapter 7.1, Table 7.1-2. If not available, see Attachment F, Equation (9) and (10). For T<sub>LA</sub>: assume average ambient temperature (T<sub>AA</sub>) for the month in which the landing occurs, unless a different temperature is known.

**Attachment C (continued)**  
 Roof Landing VOC Tracking Record

Company Name: *J.D. Streett & Company, Inc.*  
 Tank(s) Type: *Internal Floating Roof*

Page: *3 of 4*  
 Emissions: *Landing Losses*

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Tank ID	K <sub>S</sub> Standing Idle Saturation Factor <sup>77</sup>	T <sub>V</sub> Average Vapor Temperature <sup>78</sup> (°R)	M <sub>V</sub> Stock Vapor Molecular Weight <sup>79</sup> (lb/lb-mol)	W <sub>L</sub> Average Organic Liquid Density <sup>80</sup> (lb/gal)	ΔT <sub>V</sub> Average Daily Vapor Temperature Range <sup>81</sup> (°R)	ΔP <sub>V</sub> Average Daily Vapor Pressure Range <sup>82</sup> (psi)	P <sub>A</sub> Atmospheric Pressure <sup>83</sup> (psia)	K <sub>E</sub> Vapor Space Expansion Factor <sup>84</sup> (per day)

<sup>77</sup> For Tanks with a Liquid Heel:  $K_S = 1 / (1 + 0.053P_{V_A}h_v)$

Note: Not applicable to Drain Dry Tanks.

<sup>78</sup> Assume  $T_V = T_{AA}$  (average ambient temperature) for the month in which the landing occurs, unless a different temperature is known.

<sup>79</sup>  $M_V$  can be obtained from AP-42 Chapter 7.1 Organic Liquid Storage Tanks, Table 7.1-2. Properties of Selected Petroleum Liquids and Satey Data Sheets.

<sup>80</sup>  $W_L$  can be obtained from AP-42 Chapter 7.1 Organic Liquid Storage Tanks, Table 7.1-2. Properties of Selected Petroleum Liquids and Satey Data Sheets.

<sup>81</sup> Assume  $\Delta T_V = \Delta T_A$  (average daily ambient temperature range) for the month in which the landing occurs, unless a different temperature is known.

<sup>82</sup>  $\Delta P_V = P_{VX} - P_{VN}$ , where:

1.  $P_{VX}$  = vapor pressure at the average daily maximum liquid surface temperature, psia - see Attachment F, Equation (3).

2.  $P_{VN}$  = vapor pressure at the average daily minimum liquid surface temperature, psia - see Attachment F, Equation (4).

<sup>83</sup>  $P_A = 14.23$  psia according to AP-42 Chapter 7.1 Organic Liquid Storage Tanks, Table 7.1-7 Meteorological Data for Selected Locations.

<sup>84</sup>  $K_E = \Delta T_A / T_{AA} + (\Delta P_V - \Delta P_B) / (P_A - P_{VA})$ , where  $(0 < K_E \leq 1)$  and the value of  $\Delta P_B = 0$ .

Or, since location and tank color/condition are known:  $K_E = 0.0018(0.7T_A + 0.02 \alpha I)$

**Attachment C (continued)**  
 Roof Landing VOC Tracking Record

Company Name: *J.D. Streeet & Company, Inc.*  
 Tank(s) Type: *Internal Floating Roof*

Page: *4 of 4*  
 Emissions: *Landing Losses*

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Tank ID	C <sub>Sf</sub>	S	LSL	LSL-Max	LFL	LFL-Max	LT
	Filling Saturation Correction Factor for Wind <sup>85</sup>	Filling Stauration Factor <sup>86</sup>	Standing Idle Loss <sup>87</sup> (lb)	Maximum Standing Idle Loss (lb)	Filling Loss <sup>88</sup> (lb)	Maximum Filling Loss (lb)	Total Loss <sup>89</sup> (lb)
<b>Total Landing Losses<sup>90</sup> (lb)</b>							
<b>Total Landing Losses<sup>91</sup> (ton)</b>							

<sup>85</sup> C<sub>Sf</sub> = 1.0 for an Internal Floating Roof.

<sup>86</sup> Full liquid Heel, S = 0.60, Partial liquid Heel, S = 0.50, Drain Dry, S = 0.15

<sup>87</sup> For L<sub>SL</sub> and L<sub>SL-Max</sub>:

- Liquid Heel,  $L_{SL} = n_d \times K_E (P_{VA} \times V_V / 10.731 \frac{psia \cdot ft^3}{lb \cdot mol \cdot ^\circ R} T_V) M_V \times K_S$ , where  $L_{SL} \leq 5.9 \times D^2 \times h_{le} \times W_L$
- Drain Dry,  $L_{SL} = 0.0063 W_L (\pi D^2 / 4)$ , where  $L_{SL} \leq 0.60 (P_{VA} \times V_V / 10.731 \frac{psia \cdot ft^3}{lb \cdot mol \cdot ^\circ R} T_V) M_V$

<sup>88</sup> For L<sub>FL</sub> and L<sub>FL-Max</sub>:

- Liquid Heel,  $L_{FL} = (P_{VA} \times V_V / 10.731 \frac{psia \cdot ft^3}{lb \cdot mol \cdot ^\circ R} T_V) M_V (C_{Sf} \times S)$ , where  $L_{FL} \leq (5.9 \times D^2 \times h_{le} \times W_L) - L_{SL} + 0.15 (P_{VA} \times V_V / 10.731 \frac{psia \cdot ft^3}{lb \cdot mol \cdot ^\circ R} T_V) M_V$
- Drain Dry,  $L_{FL} = (P_{VA} \times V_V / 10.731 \frac{psia \cdot ft^3}{lb \cdot mol \cdot ^\circ R} T_V) M_V (C_{Sf} \times S)$

<sup>89</sup> L<sub>T</sub> = L<sub>SL</sub> + L<sub>FL</sub>

<sup>90</sup> [Total Landing Losses, lb] = sum of Total Losses for all Tanks.

<sup>91</sup> [Total Landing Losses, ton] = [Total Landing Losses, lb] x [0.0005 ton/lb]

### Attachment D

#### Liquid Loading VOC Tracking Record

Company Name: *J.D. Strett & Company, Inc.*  
 Tank(s) Type: *Internal Floating Roof*

Page: *1 of 1*  
 Emissions: *Liquid Loading Losses*

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Emission Unit	Q	S	P	M	T	L <sub>L</sub>	Vapor Collection Efficiency <sup>92</sup>	Control Efficiency <sup>93</sup>	Enforceable Limit <sup>94</sup> (mg/L)	Uncaptured VOC Emissions <sup>95</sup> (lb)	Controlled VOC Emissions <sup>96</sup> (lb)	Total VOC Emissions <sup>97</sup> (lb)
	Monthly Throughput (1,000 gal)	Saturation Factor <sup>98</sup>	True Vapor Pressure of Liquid (psia)	Vapor Molecular Weight (lb/lb-mol)	Temperature of bulk liquid loaded (°R)	Loading Loss <sup>99</sup> (lb/1,000 gal)						
EP-01 (Truck Loading Rack #1)												
EP-02 (Truck Loading Rack #2)												
EP-16 (Barge Loading)												
<b>Total VOC Emissions from Loading<sup>100</sup> (lb)</b>												
<b>Total VOC Emissions from Loading<sup>101</sup> (ton)</b>												

<sup>92</sup> A collection efficiency of 98.7 percent (a 1.3 percent leakage rate) is used because the loaded Tank Trucks pass the NSPS-level annual test (3 inches pressure change).

<sup>93</sup> The Control Efficiency is assumed to be 0.95, unless testing determines otherwise.

<sup>94</sup> The enforceable Limit of 35 mg-VOC/L-loaded applies to all Gasoline loading through the Loading Rack (EP-01) according to 40 CFR Part 60 Subpart XX.

<sup>95</sup> [Uncaptured VOC Emissions, lb] = [L<sub>L</sub>, lb] x [1-Vapor Collection Efficiency] x [Monthly Throughput, 1,000 gal/month]

<sup>96</sup> [Controlled VOC Emissions, lb] = [L<sub>L</sub>, lb] x [Vapor Collection Efficiency] x [1- Control Efficiency] x [Monthly Throughput, 1,000 gal/month]

<sup>97</sup> For Loading Rack: [Total VOC Emissions, lb] = [Uncaptured VOC Emissions, lb] + [Controlled VOC Emissions, lb]

For Ethanol Skid: [Total VOC Emissions, lb] = [L<sub>L</sub>, lb] x [Monthly Throughput, 1,000 gal/month]

<sup>98</sup> S can be obtained from AP-42 Chapter 5.2 Transportation And Marketing Of Petroleum Liquids, Table 5.2-1 Saturation Factors for Calculating Petroleum Liquid Loading Losses. The installation performs submerged loading for Tank Trucks, so S = 0.60 for dedicated normal service and S = 1.00 for dedicated vapor balance service.

<sup>99</sup>  $L_L = 12.46 \times S \times P \times M/T$

<sup>100</sup> [Total VOC Emissions from Loading, lb] = [sum of Total VOC Emissions, lb]

<sup>101</sup> [Total VOC Emissions from Loading, ton] = [Total VOC Emissions from Loading, lb] x [0.0005 ton/lb]

## Attachment E

### Plant Wide VOC Tracking Record

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Emissions Source	Number of Fittings	Emissions Factor (lb/hr/source)	Hours per Month <sup>102</sup>	VOC Emissions <sup>103</sup> (lb)	VOC Emissions, (ton)
Valves	214	9.480E-05			
Pump Seals	25	1.190E-03			
Other Equipment	33	2.866E-04			
<b>Monthly VOC Fugitive Emissions<sup>104</sup> (ton)</b>					
<b>Total Monthly VOC Liquid Loading Emissions<sup>105</sup> (ton)</b>					
<b>Total Monthly VOC Tank Standing Loss<sup>106</sup> (ton)</b>					
<b>Total Monthly VOC Tank Working Loss<sup>107</sup> (ton)</b>					
<b>Total Monthly VOC Tank Landing Loss<sup>108</sup> (ton)</b>					
<b>Total Monthly VOC Emissions<sup>109</sup> (ton)</b>					
<b>Current 12-Month VOC Emissions<sup>110</sup> (ton)</b>					

<sup>102</sup> [Hours per Month] = [Days/Month] x [24 Hours/Day]

<sup>103</sup> [VOC Emissions, lb] = [Emission Factor, lb/hr/source] x [Estimated Number of Sources] x [Hours per Month]

<sup>104</sup> [Monthly VOC Fugitive Emissions, ton] = [sum of VOC Emissions, ton]

<sup>105</sup> [Total Monthly VOC Liquid Loading Emissions, ton] = [sum of VOC Emissions from Loading (Attachment D), ton]

<sup>106</sup> [Total Monthly VOC Tank Standing Loss, ton] = [sum of Standing Loss Emissions from Tanks (Attachment B, Page 3, Page 6, and Page 9), ton]

<sup>107</sup> [Total Monthly VOC Tank Working Loss, ton] = [sum of Working Loss Emissions from Tanks (Attachment B, Page 1, Page 4, and Page 7), ton]

<sup>108</sup> [Total Monthly VOC Tank Landing Loss, ton] = [sum of Landing Loss Emissions (Attachment C, Page 4), ton]

<sup>109</sup> [Total Monthly VOC Emissions, ton] = [Monthly VOC Fugitive Emissions, ton] + [Total Monthly VOC Tank Standing Loss, ton] + [Total Monthly VOC Tank Working Loss, ton] + [Total Monthly VOC Tank Landing Loss, ton]

<sup>110</sup> [Current 12-Month VOC Emissions, ton] = [Sum of Consecutive 12 month VOC Emissions ending with the current month, ton].

Note: Current 12-month VOC Emissions of less than 100.0 tons/yr indicates compliance with Permit Condition PW001.

**Attachment F**  
 Reference Equations for Tracking Tank VOC Emissions

Equation	Source <sup>111</sup>
(1) $\Delta T_V = 0.6 \Delta T_A + 0.02 \alpha_R$	Equation (1-8) – assumes partial insulation.
(2) $\Delta T_A = T_{AX} - T_{AN}$	Equation (1-11).
(3) $P_{VX} = \exp[A - (B/T_{LX})]$	Equation (1-25) – Substitute the corresponding temperatures, $T_{LX}$ and $T_{LN}$ , into Equation 1-25 (as shown).
(4) $P_{VN} = \exp[A - (B/T_{LN})]$	
(5) $T_{LA} = 0.3 T_{AA} + 0.7 T_B + 0.005 \alpha_R I$	Equation (1-29) – assumes partial insulation.
(6) $T_{AA} = \left( \frac{T_{AX} + T_{AN}}{2} \right)$	Equation (1-30).
(7) $T_B = T_{AA} + 0.003 \alpha_S I$	Equation (1-31) – assumes no insulation.
(8) $T_V = 0.6 T_{AA} + 0.4 T_B + 0.01 \alpha_R I$	Equation (1-34) – assumes partial insulation.
(9) $A = 15.64 - 1.854 \times S^{0.5} - (0.8742 - 0.3280 \times S^{0.5}) \times \ln(RVP)$	Figure 7.1-15. Equations to determine vapor pressure constants A and B for refined petroleum stocks.
(10) $B = 8,742 - 1,042 \times S^{0.5} - (1,049 - 179.4 \times S^{0.5}) \times \ln(RVP)$	
(11) $T_{LX} = T_{LA} + 0.25 \Delta T_V$	Figure 7.1-17. Equations for the average daily maximum and minimum liquid surface temperatures.
(12) $T_{LN} = T_{LA} - 0.25 \Delta T_V$	
$\alpha_S$ = tank shell surface solar absorptance, dimensionless; see Table 7.1-6. $P_{VN}$ = vapor pressure at the average daily minimum liquid surface temperature, psia. $I$ = average daily total insolation factor, Btu/(ft <sup>2</sup> day); see Table 7.1-7. $P_{VX}$ = vapor pressure at the average daily maximum liquid surface temperature, psia. $RVP$ = stock Reid Vapor Pressure, psi. $S$ = Stock ASTM-D86 distillation slope at 10 percent volume evaporation (°F/vol%). $\Delta T_A$ = average daily ambient temperature range, °R. $T_{AA}$ = average daily ambient temperature, °R. $T_{AX}$ = average daily maximum ambient temperature, °R; see AP-42 Chapter 7.1, Table 7.1-7. $T_{AN}$ = average daily minimum ambient temperature, °R; see Table 7.1-7. $T_B$ = liquid bulk temperature, °R. $T_{LA}$ = average daily liquid surface temperature, °R. $T_{LN}$ = average daily minimum liquid surface temperature, °R. $T_{LX}$ = average daily maximum liquid surface temperature, °R. $\Delta T_V$ = average daily vapor temperature range, °R	

<sup>111</sup> All sources are obtained from AP-42 Chapter 7 Section 7.1 Organic Liquid Storage Tanks.

# STATEMENT OF BASIS

## Voluntary Limitations

In order to qualify for this Intermediate State Operating Permit, the permittee has accepted voluntary, federally enforceable emission limitations. Per 10 CSR 10-6.065(4)(C)1.A.(VI), if these limitations are exceeded, the installation becomes subject to 10 CSR 10-6.065(5) and enforcement action for operating without a valid part 70 operating permit. It is the permittee’s responsibility to monitor emission levels and apply for a part 70 operating permit far enough in advance to avoid this situation. This may mean applying more than eighteen months in advance of the exceedance, since it can take that long or longer to obtain a part 70 operating permit.

## INSTALLATION DESCRIPTION

J. D. Strett & Company, Inc. is a petroleum product storage and loading facility along the Mississippi River in St. Louis City. The installation receives petroleum products through underground pipelines and barges, stores the petroleum products in aboveground storage tanks, and then loads tanker trucks and barges with the petroleum products utilizing a loading rack. The installation unloads approximately 12 barges every year by using a 50 foot hose with a flange on both ends. In order to unload the barge’s petroleum products, a hose is lowered down and connected to the barge. The barge is equipped with a pump to transfer the products from the barge to the storage tanks. Once the pumping is complete, the necessary valves close so the pressure relief would relief back towards the tank. Pipelines deliver the remainder of the petroleum products that the installation receives. The petroleum products are stored in fixed roof tanks or internal floating roof tanks. The petroleum products at the installation include gasoline, diesel, and fuel additives. The installation is an area source of volatile organic compounds (VOCs). The installation is number 22 on the list of named sources, Petroleum storage and transfer facilities with a capacity exceeding three hundred thousand (300,000) barrels; therefore, fugitive emissions count towards major source applicability.

**Table 1 – Updated Potential to Emit for the Installation and Reported Air Pollutant Emissions, tons per year**

Pollutants	Potential Emissions <sup>1</sup>	Reported Emissions				
		2019	2018	2017	2016	2015
Volatile Organic Compounds (VOC)	< 100	38.38	38.38	38.38	38.38	38.38
Hazardous Air Pollutants (HAPs)	6.02	–	–	–	–	–

<sup>1</sup>Each emission unit was evaluated at 8,760 hours of uncontrolled annual operation unless otherwise noted. Potential emissions are based on a potential loadout of 103,200 gallons per hour for the loading racks. A capture efficiency of 99.2% is applied for truck loading operations per AP-42 Section 5.2.2.1.1 (tanker trucks passing the MACT-level annual leak test). Potential emissions used a 2019 stack test that determined the activated carbon system emitted 0.77 mg/L VOC. Potential to emit calculations from Construction Permit No. 032018-002 were used in this operating permit.

## Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Intermediate Operating Permit Application, received December 5, 2017;
- 2) 2019 Emissions Inventory Questionnaire, received April 9, 2020; and

- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.
- 4) Construction Permit No. 03-01-003, Issued April 4, 2003;
- 5) No Construction Permit Required Project No. 2011-12-051, Issued January 3, 2012;
- 6) No Construction Permit Required Project No. 2012-01-075, Issued February 3, 2012;
- 7) No Construction Permit Required Project No. 2013-02-010, Issued March 15, 2013;
- 8) Construction Permit No. 042013-004, Issued April 8, 2013;
- 9) Construction Permit No. 062013-005, Issued June 11, 2013;
- 10) Construction Permit No. 032015-021, Issued March 31, 2015; and
- 11) Construction Permit No. 032018-002, Issued March 7, 2018.

### **Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits**

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

None.

### **Other Air Regulations Determined Not to Apply to the Operating Permit**

The Air Pollution Control Program (APCP) has determined that the following requirements are not applicable to this installation at this time for the reasons stated.

#### *10 CSR 10-6.100, Alternate Emission Limits*

This rule is not applicable because the installation is in an ozone attainment area.

#### *10 CSR 10-6.220, Restriction of Emission of Visible Air Contaminants*

This regulation applies to all sources of visible emissions. Since this facility primarily emits VOC it is not anticipated that this facility will emit quantifiable visible emissions. Therefore, this regulation is not included in the operating permit.

#### *10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds*

This regulation applies to any installation that is an emission source of sulfur compounds. The Safety Data Sheets (SDS) provided by the installation do not show the presence of sulfur within the gasoline. Therefore, this regulation does not apply because the installation is not an emission source of sulfur compounds.

#### *10 CSR 10-6.261, Control of Sulfur Dioxide Emissions*

This regulation applies to any installation that emits sulfur dioxide (SO<sub>2</sub>). The loading racks are controlled by the Carbon Adsorption System. Therefore, combustion of sulfur will not occur so that sulfur dioxide could be produced. Therefore, this regulation does not apply because the installation is not an emission source of sulfur dioxide (SO<sub>2</sub>).

#### *10 CSR 10-6.400, Restriction of Emission of Particulate Matter From Industrial Processes*

This regulation applies to any operation, process, or activity that emits particulate matter. Particulate matter emissions are not anticipated from any tanks or loading racks at the installation. Therefore, this regulation does not apply to the installation.

10 CSR 10-6.405, *Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used For Indirect Heating*

This regulation restricts the emission of particulate matter from fuel burning equipment used for indirect heating. There are no emission units at the installation that burn fuel for the purpose of indirect heating. Therefore, this regulation does not apply to the installation.

**Construction Permit History**

The following construction permits were issued to this installation:

- 1) Construction Permit No. 03-01-003, Issued April 4, 2003  
This construction permit was issued to adjust the throughput limitations on gasoline, ethanol, and diesel fuels. The adjusted throughput limitations for gasoline decreased from 345 million gallons to 280 million gallons, diesel throughput increased from 75 million gallons to 135 million gallons, and ethanol throughput increased from 25 million gallons to 30 million gallons. This permit also added a condition to limit the annual rate of diesel unloading into barges without using the loading racks to 17 million gallons annually.
- 2) No Construction Permit Required Project No. 2011-12-051, Issued January 3, 2012  
This no construction permit required determination was issued for the installation the capability to load gasoline onto barges. The maximum hourly gasoline loading is 300 gallon of gasoline per minute. The potential VOC emissions from the gasoline barge loading were estimated to be 0.49 lb/hr, and the potential HAP emissions were estimated to be 0.09 lb/hr.
- 3) No Construction Permit Required Project No. 2012-01-075, Issued February 3, 2012  
This no construction permit required determination was issued to address the control device used in calculating potential emissions in Construction Permit No. 2011-12-051. The vapor recovery control device is federally enforceable due to 40 CFR Part 63 Subpart BBBB, *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities*. Therefore, the vapor recovery control device is included when determining potential emissions from the gasoline barge loading.
- 4) No Construction Permit Required Project No. 2013-02-010, Issued March 15, 2013  
This no construction permit required determination was issued to address a temporary replacement for a vapor recovery unit (VRU). The VRU uses activated carbon adsorption to control VOC emissions from Loading Racks EP-01 and EP-02. The VRU was offline for maintenance, including carbon replacement, which lasted for about a week. During this period, the installation installed a portable vapor combustion unit (VCU) manufactured by Jordan Technologies to temporarily control emissions from the loading racks.
- 5) Construction Permit No. 042013-004, Issued April 8, 2013  
This construction permit was issued to address a temporary replacement for a vapor recovery unit (VRU). The VRU uses activated carbon adsorption to control VOC emissions from Loading Racks EP-01 and EP-02. The VRU was offline for maintenance, including carbon replacement, which lasted for about a week. During this period, the installation installed a portable vapor combustion unit (VCU) manufactured by Jordan Technologies to temporarily control emissions from the loading racks.

6) Construction Permit No. 062013-005, Issued June 11, 2013

This construction permit was issued to increase fuel handling through the installation's existing fuel tanks and truck loading racks. It was determined that no fuel handling limits are necessary as the installation is bottlenecked by their loading rack capacity. EP-01 Truck Loading Rack #1 and EP-02 Truck Loading Rack #2 each contain two bays, for a total of four bays at the installation. The installation operates three gasoline/ethanol bays and one diesel bay. Each bay can handle a maximum of three trucks per hour with the gasoline/ ethanol trucks each having a capacity of 8,600 gallons and the diesel trucks each having a capacity of 7,500 gallons. The combined maximum hourly design rate of the three gasoline/ethanol loading bays is 77,400 gal/hr (69,660 gal/hr of gasoline and 7,740 gal/hr of ethanol). The combined maximum hourly design rate of the diesel bay is 67,500 gal/hr of diesel. The special conditions of this permit are superceded by Construction Permit No. 032015-021 and do not appear in this operating permit.

7) Construction Permit No. 032015-021, Issued March 31, 2015

This construction permit was issued to modify the input manifold piping system on Truck Loading Rack #1 so that both bays can accommodate EP-10 (gasoline blended with 10% ethanol). Blending occurs by sequentially loading first ethanol and then gasoline into the trucks. Modification of the truck loading bay increases maximum gasoline throughputs from 69,600 gal/hr to 92,800 gal/hr and maximum denatured ethanol throughputs from 7,740 gal/hr to 10,320 gal/hr. All of the loading racks can still accommodate diesel. The conditions of this permit supersede Special Conditions 2 and 3 found in Construction Permit 062013-005 and appear in this operating permit as Permit Condition 004.

8) Construction Permit No. 032018-002, Issued March 7, 2018

This construction permit was issued for the installation of a barge loading and unloading operation. No new equipment will be installed, as the necessary piping and storage tanks already exist onsite, and the current loading racks will not be modified. Barges filled with gasoline and diesel will be unloaded directly into the existing storage tanks (EP-03, EP-05, EP-07, EP-08 & EP-09 for gasoline; EP-04 & EP-06 for diesel), and diesel will be loaded from the storage tanks into the barges. The maximum design rate of the new process will be 3,000 barrels per hour (126,000 gallons per hour). All storage tanks containing gasoline will be controlled by an existing activated carbon adsorption system. The Special Conditions from Construction Permit No. 032018-002 appear in this operating permit as Permit Condition 005.

**New Source Performance Standards (NSPS) Applicability**

40 CFR Part 60, Subpart K, *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978*

This subpart applies to each storage vessel for petroleum liquids which has a capacity greater than 151, 416 liters (40,000 gallons), but not exceeding 246,052 liters (65,000 gallons), and commences construction or modification after March 8, 1974, and prior to May 19, 1978 or has a capacity greater than 246,052 liters (65,000 gallons) and commences construction or modification after June 11, 1973, and prior to May 19, 1978. Tank #4 (EP-04) is the only tank at the installation that meets these requirements. However, Tank #4 (EP-04) contains diesel fuel with a Reid vapor pressure of less than 6.9

kPa (1.0 psia) and is exempt from this subpart per §60.113(d)(1). Therefore, this subpart does not apply to the installation.

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

This subpart applies to storage vessels with a storage capacity greater than 151,416 liters (40,000 gallons) that is used to store petroleum liquids for which construction is commenced after May 18, 1978 and prior to July 23, 1984. The tanks constructed or modified during the applicable period for this subpart are EP-10 (Tank #8) and EP-11 (Tank #9), but these tanks have a capacity less than applicable capacity for this subpart, 151,416 liters (40,000 gallons). Therefore, this subpart does not apply to the installation.

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

This subpart applies to storage vessels with a capacity greater than or equal to 75 cubic meters (approximately 19,812 gallons) that is used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984. The tanks constructed or modified during the applicable period for this subpart and meet the applicable capacity requirements for this subpart are EP-20 (Tank#17) and EP-21 (Tank #18). However, these two tanks store Ethanol, which has a maximum true vapor pressure less than 15.0 kPa. Therefore, this subpart does not apply to EP-20 (Tank#17) and EP-21 (Tank #18) per §60.110b(b), and this subpart does not apply to the installation.

**Table 2 - Applicability Overview for 40 CFR Part 60 Subpart K, Ka, and Kb.**

Emission Unit	Tank Description	Applicability		
		K	Ka	Kb
EP-03	Tank #3: 2,368,000 Gallons, 1970	N/A	N/A	N/A
EP-04	Tank #4: 2,310,000 Gallons, 1973	RVP < 6.9 kPa	N/A	N/A
EP-05	Tank #1: 3,360,000 Gallons, 1970	N/A	N/A	N/A
EP-06	Tank #7: 3,360,000 Gallons, Prior to June 1973	N/A	N/A	N/A
EP-07	Tank #2: 2,310,000 Gallons, 1970	N/A	N/A	N/A
EP-08	Tank #6: 3,360,000 Gallons, Prior to June 1973	N/A	N/A	N/A
EP-09	Tank #5: 3,360,000 Gallons, 1970	N/A	N/A	N/A
EP-10	Tank #8: 30,000 Gallons, 1980	N/A	< 40,000 gal	N/A
EP-11	Tank #9: 30,000 Gallons, 1980	N/A	< 40,000 gal	N/A
EP-12	Tank #10: 5,000 Gallons, 1970	N/A	N/A	N/A
EP-13	Tank #11: 10,000 Gallons, 1994	N/A	N/A	< 19,812.9 gal
EP-14	Tank #13: 10,000 Gallons, 1994	N/A	N/A	< 19,812.9 gal
EP-15	Tank #12: 10,000 Gallons, 1994	N/A	N/A	< 19,812.9 gal
EP-18	Tank #15: 8,000 Gallons, 1973	< 40,000 gal	N/A	N/A
EP-19	Tank #16: 10,000 Gallons, 2009	N/A	N/A	< 19,812.9 gal
EP-20	Tank #17: 30,000 Gallons, 2011	N/A	N/A	Max TVP < 15.0 kPa
EP-21	Tank #18: 30,000 Gallons, 2011	N/A	N/A	Max TVP < 15.0 kPa

“X” indicates the emission unit is subject to the provisions of the specified subpart.

“N/A” indicates the emission unit does not fall within the applicable date required for the specified subpart.

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

The provisions of this subpart apply to loading racks at bulk gasoline terminals which deliver liquid product into gasoline tank trucks and commenced construction or modification after December 17, 1980. This subpart applies to EP-01 (Truck Loading Rack #1, South Rack) because the loading rack delivers liquid product into gasoline tank trucks and was installed in 2015, after the December 17, 1980 applicability date. This subpart does not apply to EP-02 (Truck Loading Rack #2, North Rack) because the loading rack was installed in 1973, before the applicability date of December 17, 1980.

40 CFR Part 60 Subpart GGG *Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After January 4, 1983, and on or Before November 7, 2006; and*

40 CFR Part 60 Subpart GGGa *Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006*

These subparts apply to petroleum refineries. Petroleum refinery means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through the distillation of petroleum, or through the redistillation, cracking, or reforming of unfinished petroleum derivatives. The installation stores and loads petroleum products, but does not produce petroleum products. Therefore, the installation is not a petroleum refinery, and these subparts do not apply to the installation.

**Maximum Achievable Control Technology (MACT) Applicability**

40 CFR Part 63 Subpart R *National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)*

This subpart applies to major sources. The installation is an area source, therefore this subpart does not apply per §63.420(a)(2).

40 CFR Part 63 Subpart CC *National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries*

This subpart applies to petroleum refineries. Petroleum refinery means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through the distillation of petroleum, or through the redistillation, cracking, or reforming of unfinished petroleum derivatives. The installation stores and loads petroleum products, but does not produce petroleum products. Therefore, the installation is not a petroleum refinery, and this subpart does not apply to the installation.

40 CFR Part 63, Subpart OO, *National Emission Standards for Tanks—Level 1;*

40 CFR Part 63, Subpart TT, *National Emission Standards for Equipment Leaks—Control Level 1;*

40 CFR Part 63, Subpart UU, *National Emission Standards for Equipment Leaks—Control Level 2;* and

40 CFR Part 63, Subpart WW, *National Emission Standards for Storage Vessels—Control Level 2*

These subparts do not apply to the installation because these subparts only apply to installations subject to other subparts, which reference the use of these subparts for air emission control.

40 CFR Part 63 Subpart BBBBBB *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities*

This subpart applies to gasoline storage tanks and gasoline loading racks at bulk gasoline terminals at area sources of HAP. This subpart applies to EP-01 (Truck Loading Rack #1), EP-02 (Truck Loading

Rack #2), EP-03 (Tank #3), EP-05 (Tank #1), EP-07 (Tank #2), EP-08 (Tank #6), and EP-09 (Tank #5). None of the other tanks at the installation store gasoline and therefore are not subject to this subpart. EP-16A (Barge Loading/Unloading, Diesel Fuel) and EP-16B (Barge Unloading; Gasoline) are not subject to this subpart because neither emission unit loads gasoline.

40 CFR Part 63 Subpart CCCCCC – *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities*

This subpart applies to gasoline dispensing facilities. The installation does not meet the definition of a gasoline dispensing facility. While it does store gasoline, it does not dispense gasoline into the fuel tanks of vehicles. Therefore, this subpart does not apply.

**National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability**

40 CFR Part 61 Subpart M – *National Emission Standard for Asbestos*

This regulation applies to the installation and appears in the Core Permit Requirements section of the Operating Permit.

**Greenhouse Gas Emissions**

Note that this source may be subject to the Greenhouse Gas Reporting Rule. However, the preamble of the GHG Reporting Rule clarifies that Part 98 requirements do not have to be incorporated in operating permits at this time. In addition, Missouri regulations do not require the installation to report CO<sub>2</sub> emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation’s CO<sub>2</sub> emissions were not included within this permit. If required to report, the applicant is required to report the data directly to EPA. The public may obtain CO<sub>2</sub> emissions data by visiting <http://epa.gov/ghgreporting/ghgdata/reportingdatasets.html>.

**Other Regulatory Determinations**

10 CSR 10-5.220 *Control of Emissions During Petroleum Liquid Storage, Loading, and Transfer*

This regulation restricts volatile organic compound emissions from the handling of petroleum liquids for petroleum storage tanks with a capacity greater than forty thousand gallons and the loading of gasoline into delivery vessels. The applicability determination for each tank is shown below in Table 3. This regulation appears in the operating permit as Permit Condition 001 for storage tanks and Permit Condition 002 for loading racks.

**Table 3 - Applicability Overview for 10 CSR 10-5.220**

Emission Unit	Tank Description	Applicability
EP-01	Truck Loading Rack #1	X
EP-02	Truck Loading Rack #2	X
EP-03	Tank #3: 2,368,000 Gallons, 1970	X
EP-04	Tank #4: 2,310,000 Gallons, 1973	Exempt per 5.220(1)(C)B. – True Vapor Pressure < 4.0 psia @ 90 °F
EP-05	Tank #1: 3,360,000 Gallons, 1970	X
EP-06	Tank #7: 3,360,000 Gallons, 1973	Exempt per 5.220(1)(C)B. – True Vapor Pressure < 4.0 psia @ 90 °F
EP-07	Tank #2: 2,310,000 Gallons, 1970	X
EP-08	Tank #6: 3,360,000 Gallons, 1973	X
EP-09	Tank #5: 3,360,000 Gallons, 1970	X
EP-10	Tank #8: 30,000 Gallons, 1980	N/A – Capacity < 40,000 gallons
EP-11	Tank #9: 30,000 Gallons, 1980	N/A – Capacity < 40,000 gallons
EP-12	Tank #10: 5,000 Gallons, 1970	N/A – Capacity < 40,000 gallons

Emission Unit	Tank Description	Applicability
EP-13	Tank #11: 10,000 Gallons, 1994	N/A – Capacity < 40,000 gallons
EP-14	Tank #13: 10,000 Gallons, 1994	N/A – Capacity < 40,000 gallons
EP-15	Tank #12: 10,000 Gallons, 1994	N/A – Capacity < 40,000 gallons
EP-16A	Barge Loading/Unloading, Diesel	N/A – Regulation does not apply to Diesel Fuel
EP-16B	Barge Unloading; Gasoline	N/A – Barge does not meet definition of “Delivery Vessel”
EP-18	Tank #15: 8,000 Gallons, 1973	N/A – Capacity < 40,000 gallons
EP-19	Tank #16: 10,000 Gallons, 2009	N/A – Capacity < 40,000 gallons
EP-20	Tank #17: 30,000 Gallons, 2011	N/A – Capacity < 40,000 gallons
EP-21	Tank #18: 30,000 Gallons, 2011	N/A – Capacity < 40,000 gallons

“X” indicates the emission unit is subject to the provisions of 10 CSR 10-5.220.

### 10 CSR 10-5.500 *Control of Emissions From Volatile Organic Liquid Storage*

This regulation applies to storage vessels throughout the City of St. Louis and St. Charles, St. Louis, Jefferson, and Franklin Counties. This regulation contains exceptions for storage vessels that with the applicable capacities, as shown below in Table 4. All Tanks at the installation are exempt from the provisions of this regulation, but certain tanks are required to keep records for tank capacity and dimensions. The record keeping requirements for this regulation appear in this operating permit as Permit Condition 003.

**Table 4 - Applicability Overview for 10 CSR 10-5.500**

Emission Unit	Tank Description	Applicability
EP-03	Tank #3: 2,368,000 Gallons, 1970	Exempt per 5.500(1)(C)5. – Subject to 5.220
EP-04	Tank #4: 2,310,000 Gallons, 1973 <sup>1</sup>	Exempt per 5.500(1)(B)1. – Requires Recordkeeping
EP-05	Tank #1: 3,360,000 Gallons, 1970	Exempt per 5.500(1)(C)5. – Subject to 5.220
EP-06	Tank #7: 3,360,000 Gallons, 1973 <sup>1</sup>	Exempt per 5.500(1)(B)1. – Requires Recordkeeping
EP-07	Tank #2: 2,310,000 Gallons, 1970	Exempt per 5.500(1)(C)5. – Subject to 5.220
EP-08	Tank #6: 3,360,000 Gallons, 1973	Exempt per 5.500(1)(C)5. – Subject to 5.220
EP-09	Tank #5: 3,360,000 Gallons, 1970	Exempt per 5.500(1)(C)5. – Subject to 5.220
EP-10	Tank #8: 30,000 Gallons, 1980 <sup>2</sup>	Exempt per 5.500(1)(B)2. – Requires Recordkeeping
EP-11	Tank #9: 30,000 Gallons, 1980 <sup>2</sup>	Exempt per 5.500(1)(B)2. – Requires Recordkeeping
EP-12	Tank #10: 5,000 Gallons, 1970 <sup>2</sup>	Exempt per 5.500(1)(B)2. – Requires Recordkeeping
EP-13	Tank #11: 10,000 Gallons, 1994 <sup>2</sup>	Exempt per 5.500(1)(B)2. – Requires Recordkeeping
EP-14	Tank #13: 10,000 Gallons, 1994 <sup>2</sup>	Exempt per 5.500(1)(B)2. – Requires Recordkeeping
EP-15	Tank #12: 10,000 Gallons, 1994 <sup>2</sup>	Exempt per 5.500(1)(B)2. – Requires Recordkeeping
EP-18	Tank #15: 8,000 Gallons, 1973 <sup>2</sup>	Exempt per 5.500(1)(B)2. – Requires Recordkeeping
EP-19	Tank #16: 10,000 Gallons, 2009 <sup>2</sup>	Exempt per 5.500(1)(B)2. – Requires Recordkeeping
EP-20	Tank #17: 30,000 Gallons, 2011 <sup>2</sup>	Exempt per 5.500(1)(B)2. – Requires Recordkeeping
EP-21	Tank #18: 30,000 Gallons, 2011 <sup>2</sup>	Exempt per 5.500(1)(B)2. – Requires Recordkeeping

“X” indicates the emission unit is subject to the provisions of 10 CSR 10-5.500.

<sup>1</sup> Except as specified in 5.500(4)(E) and (4)(H), storage vessels with a capacity greater than or equal to forty thousand (40,000) gallons storing a liquid with a maximum true vapor pressure less than one-half (0.5) psia are exempt from the provisions of this rule.

<sup>2</sup> Except as specified in 5.500(4)(E) and (4)(H), storage vessels with a design capacity less than forty thousand (40,000) gallons are exempt from the provisions of this rule.

### Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons.

- 1) The specific pollutant regulated by that rule is not emitted by the installation.
- 2) The installation is not in the source category regulated by that rule.
- 3) The installation is not in the county or specific area that is regulated under the authority of that rule.
- 4) The installation does not contain the type of emission unit which is regulated by that rule.
- 5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).