

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

October 15, 2014

**PERMIT TO INSTALL**  
168-11A

**ISSUED TO**  
U.S. Oil Cheboygan River Terminal

**LOCATED AT**  
311 Coast Guard Drive  
Cheboygan, Michigan

**IN THE COUNTY OF**  
Cheboygan

**STATE REGISTRATION NUMBER**  
B6828

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:

**September 25, 2014**

DATE PERMIT TO INSTALL APPROVED:

**October 15, 2014**

SIGNATURE:

DATE PERMIT VOIDED:

SIGNATURE:

DATE PERMIT REVOKED:

SIGNATURE:

**PERMIT TO INSTALL**

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**Common Abbreviations / Acronyms**

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	BTU	British Thermal Unit
BACT	Best Available Control Technology	°C	Degrees Celsius
CAA	Clean Air Act	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
CO <sub>2</sub> e	Carbon Dioxide Equivalent	°F	Degrees Fahrenheit
COM	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	H <sub>2</sub> S	Hydrogen Sulfide
GACS	Gallon of Applied Coating Solids	hp	Horsepower
GC	General Condition	lb	Pound
GHGs	Greenhouse Gases	kW	Kilowatt
HAP	Hazardous Air Pollutant	m	Meter
HVLP	High Volume Low Pressure *	mg	Milligram
ID	Identification	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram
MAP	Malfunction Abatement Plan	NO <sub>x</sub>	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality (Department)	PM	Particulate Matter
MSDS	Material Safety Data Sheet	PM10	PM with aerodynamic diameter ≤10 microns
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	PM with aerodynamic diameter ≤ 2.5 microns
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonably Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO <sub>2</sub>	Sulfur Dioxide
SCR	Selective Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TAC	Toxic Air Contaminant	µg	Microgram
TEQ	Toxicity Equivalence Quotient	VOC	Volatile Organic Compound
VE	Visible Emissions	yr	Year

\* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

### GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. **(R 336.1301)**
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
  
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). **(R 336.1370)**
  
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

**SPECIAL CONDITIONS**

**EMISSION UNIT SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

<b>Emission Unit ID</b>	<b>Emission Unit Description (Process Equipment &amp; Control Devices)</b>	<b>Product Stored in Tank/ Tank Size</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
EULOADRACK	Three lane loading rack for loading petroleum products into tank trucks. Displaced vapors are controlled by a vapor recovery unit	--	1/1/1994/ 2012	FGFACILITY
EUTANK87	Horizontal fixed roof storage tank identified as Tank 87	Additive/ 350 gallons	1/1/2005	FGFACILITY
EUTANK89	Horizontal fixed roof storage tank identified as Tank 89	Additive/ 500 gallons	1/1/2005	FGFACILITY
EUTANK90	Horizontal fixed roof storage tank identified as Tank 90	Additive/ 6000 gallons	1/1/1991	FGFACILITY
EUTANK91	Horizontal fixed roof storage tank identified as Tank 91	Additive/ 6000 gallons	1/1/1991	FGFACILITY
EUTANK92	Horizontal fixed roof storage tank identified as Tank 92	Additive/ 3000 gallons	1/1/1990	FGFACILITY
EUTANK93	Horizontal fixed roof storage tank identified as Tank 93	Additive/ 6000 gallons	1/1/1993	FGFACILITY
EUTANK99	Horizontal fixed roof storage tank identified as Tank 99	Additive/ 500 gallons	1/1/1994	FGFACILITY
EUTANK100	Horizontal fixed roof storage tank identified as Tank 100	Additive/ 350 gallons	1/1/1996	FGFACILITY
EUTANK101	Internal floating roof storage tank identified as tank 101	Gasoline, distillate or ethanol/ 803,670 Gallons	1/1/1955	FGRULE604TANKS FGFACILITY
EUTANK102	Internal floating roof storage tank identified as tank 102	Gasoline, distillate or ethanol/ 1,985,382 Gallons	1/1/1957/ 1987	FGNSPSTANKS FGFACILITY
EUTANK103	Internal floating roof non-contact storage tank identified as tank 103	Gasoline, distillate or ethanol/ 612,612 Gallons	1/1/1957/ 1987	FGNSPSTANKS FGFACILITY
EUTANK104	Vertical fixed roof storage tank identified as tank 104	Distillate/ 1,804,857 Gallons	1/1/1955/ 2012	FGFACILITY
EUTANK105	Internal floating roof storage tank identified as tank 105	Gasoline, distillate or ethanol/ 319,830 Gallons	1/1/1955	FGRULE604TANKS FGFACILITY

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Product Stored in Tank/ Tank Size	Installation Date / Modification Date	Flexible Group ID
EUTANK106	Internal floating roof storage tank identified as tank 106	Gasoline, distillate or ethanol/ 1,015,232 Gallons	1/1/1955/ 2012 2014	FGNSPSTANKS FGFACILITY
EUFUGITIVES	Piping components	--	1/1/1955/ 1994/ 2012	FGFACILITY

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.

**The following conditions apply to:**  
**EULOADRACK**

**DESCRIPTION:** Three lane loading rack for loading petroleum product into tank trucks.

**Flexible Group ID:** EULOADRACK

**POLLUTION CONTROL EQUIPMENT:** Vapor Recovery Unit (VRU), has one stack identified as SVLOADRACK. The VRU includes a carbon adsorption system.

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	10 mg per liter of product loaded	Test Protocol*	EULOADRACK	V.3, VI.8	R 336.1205(3) 40 CFR 60.502(b) 40 CFR 60.502(c) R 336.1702(a) R 336.1225

\*Test Protocol shall specify averaging time.

**II. MATERIAL LIMITS**

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Gasoline	161,330,400 gallons	12-month rolling time period as determined at the end of each calendar month.	EULOADRACK	VI.1	R 336.1205(3)
2. Distillate	600,000,000 gallons	12-month rolling time period as determined at the end of each calendar month.	EULOADRACK	VI.1	R 336.1205(3)

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall maintain and operate in a satisfactory manner a vapor tight collection line which delivers the VOC to EULOADRACK's VRU when loading any tank truck with an organic compound having a true vapor pressure greater than 1.5 psia, or when loading a tank truck which has previously contained an organic compound having a true vapor pressure greater than 1.5 psia. **(R 336.1205(3), R 336.1702(a), R 336.1706(2), R 336.1706(3), R 336.1910, 40 CFR 60.502(a))**
2. The permittee shall not load any tank truck with an organic compound having a true vapor pressure greater than 1.5 psia at actual conditions unless the following provisions are met:
  - a) The delivery vessel shall be filled by a submerged fill pipe. **(R 336.1706(1))**
  - b) The delivery vessel shall be controlled by a vapor recovery system that captures all displaced organic vapor and air by means of a vapor tight collection line. **(R 336.1706(2))**
  - c) The delivery vessel shall be equipped, maintained, or controlled with all of the following: **(R 336.1706(3))**

- i) An interlocking system or procedure to ensure that the vapor-tight collection line is connected before any organic compound can be loaded.
    - ii) A device to ensure that the vapor-tight collection line shall close upon disconnection so as to prevent the release of organic vapor.
    - iii) A device to accomplish complete drainage before the loading device is disconnected, or a device to prevent liquid drainage from the loading device when not in use.
    - iv) Pressure-vacuum relief valves that are vapor-tight and set to prevent the emission of displaced organic vapor during the loading of the delivery vessel, except under emergency conditions.
    - v) Hatch openings that are kept closed and vapor-tight during the loading of the delivery vessel.
  - d) The permittee shall develop written procedures for the operation of all applicable control measures and shall post the procedures in an accessible, conspicuous location near the loading device. **(R 336.1706(4))**
3. The permittee shall limit the loadings of liquid product onto gasoline tank trucks to vapor-tight gasoline tank trucks using the following procedures: **(40 CFR 60.502(e))**
- a) The permittee shall obtain the vapor tightness documentation described in SC VI. 5, for each gasoline tank truck which is to be loaded at the affected facility.
  - b) The permittee shall require the tank identification number to be recorded as each gasoline tank truck is loaded at the affected facility.
  - c) The permittee shall assure the terminal operates EULOADRACK using an automated system called Guardian 3. With this system, no tank truck can load at the facility unless the tank truck is registered with the permittee at the terminal and has a valid vapor tightness certificate entered into the Guardian 3 system by the permittee. If the certificate on file with the permittee has expired, the tank truck shall not be allowed to load.
  - d) Alternate procedures to those described in paragraphs (a) through (c) above for limiting gasoline tank truck loadings may be used upon application to, and approval by, the Department.
4. The permittee shall assure 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). **(40 CFR 60.502(i))**
5. The vapor collection and liquid loading equipment shall be operated to prevent gauge pressure in the delivery tank from exceeding 4,500 Pascals (450 mm of water) during product loading. **(40 CFR 60.502(h))**
6. There shall be no visible liquid leaks from any vessel or collection system, except when the disconnection of dry breaks in liquid lines produces a few drops of liquid. **(R 336.1627(5))**
7. The permittee shall not operate the vapor collection system unless all of the following provisions are met: **(R 336.1627(6-11))**
- a) There shall be no gas detector reading greater than or equal to 100% of the lower explosive limit at a distance of 1 inch from the location of the potential leak in the vapor collection system. Leaks shall be detected by a combustible gas detector using the test procedure described in R 336.2005, or a test procedure approved by the Department.
  - b) There shall be no visible leaks, except from the disconnection of bottom loading dry breaks and from raising top loading vapor heads, where a few drops are permitted.
  - c) The vapor collection system shall be designed and operated to prevent gauge pressure in the delivery vessel from exceeding 0.6 pounds per square inch and to prevent vacuum from exceeding -0.2 pounds per square inch gauge.
  - d) The Department may require the permittee to test the system in accordance with R 336.2005. The tests shall be conducted within 60 days following receipt of written notification from the Department.
  - e) Any tank truck or component of a vapor collection system that fails to meet any provision above shall not be operated until the necessary repairs have been made, the vessel or collection system has been retested, and the test results have been submitted to the Department.

8. The permittee shall assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the affected loading racks. **(40 CFR 60.502(g))**
9. The permittee shall not operate EULOADRACK unless a MAP as described in Rule 911(2), for EULOADRACK is implemented and maintained. The MAP shall, at a minimum, specify the following:
  - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
  - d) Leaks shall be detected by a combustible gas detector using the test procedure described in R 336.2005, or a test procedure approved by the Department. The MAP shall outline actions to be taken if there is a gas detector reading greater than or equal to 100 percent of the lower explosive limit at a distance of 1 inch from the location of the potential leak in the vapor collection system.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1225, R 336.1331, R 336.1627(7), R 336.1702(a), R 336.1910, R 336.1911)**

10. The permittee shall maintain the vacuum and carbon transmitters on the Carbon Adsorption System on EULOADRACK. The permittee shall not operate the facility unless the Carbon Adsorption System is installed and operating properly. **(R 336.1205(3))**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The vapor collection system shall be designed to prevent any total organic compound's vapor collected at one loading rack from passing to another loading rack. **(40 CFR 60.502(d))**
2. The permittee shall assure that the loading of gasoline tank trucks are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system. **(40 CFR 60.502(f))**
3. The vapor collection and liquid loading equipment shall be designed to prevent gauge pressure in the delivery tank from exceeding 4,500 Pascals (450 mm of water) during product loading. **(40 CFR 60.502(h))**

#### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall assure compliance with the testing requirements of 40 CFR 60.503(a). **(40 CFR 60.503(a)).**

2. Immediately before conducting the performance test on the vapor collection system, vapor processing system, and the vapor collection and liquid loading equipment, the permittee shall use Method 21 to monitor for leakage of vapor in the vapor collection system. The permittee shall repair all leaks with readings of 10,000 ppm (as methane) or greater before conducting the performance test. **(40 CFR 60.503(b))**
3. The permittee shall determine compliance with VOC emission limit in SC I.1 as outlined in the test method and procedures in 40 CFR 60.503(c). **(40 CFR 60.503(c))**
4. To prevent gauge pressure in the delivery tank from exceeding 4,500 Pascals (450 mm of water) during product loading, the permittee shall determine compliance as follows:
  - a) A pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument), capable of measuring up to 500 mm of water gauge pressure with  $\pm 2.5$  mm of water precision, shall be calibrated and installed on the terminal's vapor collection system at a pressure tap located as close as possible to the connection with the gasoline tank truck.
  - b) During the performance test, the pressure shall be recorded every 5 minutes while a gasoline truck is being loaded; the highest instantaneous pressure that occurs during each loading shall also be recorded. Every loading position must be tested at least once during the performance test. **(40 CFR 60.503(d))**
5. The permittee shall conduct a stack test on the VRU once every five years to determine the control efficiency of the VRU. **(R 336.2001, R 336.2003, R 336.2004)**

#### **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep records in gallons of the throughput of gasoline and distillate for each calendar month and 12-month rolling time period. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3))**
2. The permittee shall maintain a log of all vapor control system outages, however no organic compounds having true vapor pressure of more than 1.5 psia shall be loaded out during outages. **(R 336.1706)**
3. The permittee shall keep on file at the terminal in a permanent form available for inspection the required tank truck vapor tightness documentation. **(40 CFR 60.505(a))**
4. The permittee shall assure 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:
  - a) Test title: Gasoline Delivery Tank Pressure Test—EPA Reference Method 27.
  - b) Tank owner and address.
  - c) Tank identification number.
  - d) Testing location.
  - e) Date of test.
  - f) Tester name and signature.
  - g) Witnessing inspector, if any: Name, signature, and affiliation.
  - h) Test results: Actual pressure change in 5 minutes, mm of water (average for 2 runs) **(40 CFR 60.505(b), R336.1627)**

5. 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. Detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected. **(40 CFR 60.502(j))**
6. A record of each monthly leak inspection required of the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be kept on file at the terminal. Inspection records shall include, as a minimum, the following information: **(40 CFR 60.502(j), 40 CFR 60.505(c))**
  - a) Date of inspection.
  - b) Findings (may indicate no leaks discovered; or location, nature, and severity of each leak).
  - c) Leak determination method.
  - d) Corrective action (date each leak repaired; reasons for any repair interval in excess of 15 days).
  - e) Inspector name and signature.
7. The permittee shall keep records of all replacements or additions of components performed on an existing vapor processing system. **(40 CFR 60.505(f))**
8. The permittee shall monitor and keep records of the VRU, including the Carbon Adsorption System in accordance with the Department approved Monitoring and Inspection Plan. **(R 336.1201, R 336.1205(3), 40 CFR 60.502(b), 40 CFR 60.502(c), R 336.1702(a), R 336.1225)**
9. The permittee shall implement a Monitoring and Inspection Plan for the Carbon Adsorption System. The plan shall address the permittee's approach for meeting the following requirements. **(R 336.1205(3), 40 CFR 60.502(b), 40 CFR 60.502(c), R 336.1702(a), R 336.1225)**
  - a) The lowest maximum required vacuum level and duration needed to assure regeneration of the carbon beds shall be determined by an engineering analysis or from the manufacturer's recommendation and shall be documented in the monitoring and inspection plan.
  - b) 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.
  - c) 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.
  - d) Monitoring and Inspection Plan for the Carbon Adsorption System shall specify conditions that would be considered malfunctions of the Carbon Adsorption System during the inspections or automated monitoring performed under items a. through c. above, 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.

## **VII. REPORTING**

1. No less than 60 days prior to testing for VOC, the permittee shall submit a complete test plan to the Department. The exact time and location of the vapor collection system test shall be given to the Department, in writing, not less than seven days before the actual test. The Department must approve the final plan prior to testing. Documentation of the test that states the date and location of the test, test procedures, the type of equipment used, and the results of the test shall be submitted to the Department within 60 days following the last date of the test. If the time or location of the test changes for any reason, then the owner or operator shall notify the Department as soon as practical. **(R 336.1627(10), R 336.2001(3), (R 336.2001(4), (R 336.2001(5))**

**VIII. STACK/VENT RESTRICTIONS**

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter/Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVLOADRACK	10 <sup>1</sup>	70 <sup>1</sup>	R 336.1225

**IX. OTHER REQUIREMENTS**

1. The permittee shall comply with all provisions of the Federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subpart XX as they apply to EULOADRACK. **(40 CFR Part 60, Subparts A and XX)**

**Footnotes:**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

**FLEXIBLE GROUP SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGNSPSTANKS	EUTANK102, EUTANK103 and EUTANK106 are gasoline, distillate or ethanol storage tanks with a fixed roof in combination with an internal floating roof. EUTANK106 is a distillate or gasoline tank with a fixed roof in combination with an internal floating roof. Although these tanks were constructed in the 1950's, they were modified after 1984 and thus are subject to NSPS, 40 CFR Part 60 Subpart Kb	EUTANK102, EUTANK103, EUTANK106
FGRULE604TANKS	EUTANK101 and EUTANK105 are gasoline, distillate or ethanol storage tanks with internal floating roofs. These two tanks, constructed in 1955, were never modified after June 11, 1973 and thus are not subject to NSPS, 40 CFR Part 60 Subpart K. They are subject to Rule 604.	EUTANK101, EUTANK105
FGFACILITY	<p>The facility is a bulk petroleum terminal which receives gasoline, distillate, and ethanol fuels via barge/vessel while product leaves the terminal via truck.</p> <p>FGFACILITY includes all process equipment at the source including grand-fathered equipment and exempt equipment.</p>	EULOADRACK, EUTANK87, EUTANK89, EUTANK90, EUTANK91, EUTANK92, EUTANK93, EUTANK99, EUTANK100, EUTANK101, EUTANK102, EUTANK103, EUTANK104, EUTANK105, EUTANK106, EUFUGITIVES

**The following conditions apply to:**  
**FGNSPSTANKS**

**DESCRIPTION:** Three gasoline storage tanks with internal floating roofs.

**Emission Units:** EUTANK102, EUTANK103, EUTANK106

**POLLUTION CONTROL EQUIPMENT:**

<b>Emission Unit</b>	<b>Roof Type</b>	<b>Primary seal</b>	<b>Secondary seal</b>
EUTANK102	Internal Floating Roof	Mechanical shoe	NA
EUTANK103	Internal Floating Roof	Mechanical shoe	Shoe mounted
EUTANK106	Internal Floating Roof	Mechanical shoe	NA

**I. EMISSION LIMITS**

NA

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate FGNSPSTANKS unless a MAP as described in Rule 911(2), for FGNSPSTANKS is implemented and maintained. The MAP shall, at a minimum, specify the following:
  - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1910, R 336.1911)**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall equip and operate each tank in FGNSPSTANKS with a fixed roof in combination with an internal floating roof. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a tank 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 tank is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.  
**(R 336.1604(1)(b), 40 CFR 60.112b(a)(1)(i))**
2. Each internal floating roof in FGNSPSTANKS shall be equipped with a one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
  - a) Foam- or liquid-filled seal
  - b) Two seals mounted one above the other
  - c) mechanical shoe seal**(40 CFR 60.112b(a)(1)(ii))**
3. The permittee shall equip each tank in FGNSPSTANKS with the following:
  - a) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover or lid which shall be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. **(R 336.1604(2)(a), 40 CFR 60.112b(a)(1)(iv))**
  - b) Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. **(R 336.1604(2)(b), 40 CFR 60.112b(a)(1)(v))**
  - c) Rim space vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. **(R 336.1604(2)(c), 40 CFR 60.112b(a)(1)(vi))**
  - d) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening. **(40 CFR 60.112b(a)(1)(vii))**
  - e) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasket sliding cover. **(40 CFR 60.112b(a)(1)(viii))**
  - f) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasket sliding cover. **(40 CFR 60.112b(a)(1)(ix))**

#### **V. TESTING/SAMPLING**

1. The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal prior to filling each tank in FGNSPSTANKS with Volatile Organic Liquid (VOL). If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the tank. **(40 CFR 60.113b(a)(1))**
2. For each tank in FGNSPSTANKS, the permittee shall visually inspect the internal floating roof and the primary seal or the secondary seal, through manholes and roof hatches on the fixed roof at least once every 12 months. If the internal floating roof is not resting on the surface of the VOL inside the tank, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the tank from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the tank cannot be emptied within 45 days, a 30-day extension may be requested from the Department in the required inspection report. **(40 CFR 60.113b(a)(2))**

3. For each tank in FGNSPSTANKS, the permittee shall, at intervals no greater than 10 years, visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the tank with a VOL. **(40 CFR 60.113b(a)(4))**

#### **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep readily accessible records showing the dimensions of EUTANK102, EUTANK103, and EUTANK106, and an analysis showing the capacity of the storage vessels. **(40 CFR 60.116b(b))**
2. The permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. **(40 CFR 60.116b(c))**

#### **VII. REPORTING**

1. The permittee shall notify the Department in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required to afford the Department the opportunity to have an observer present. If the required inspection is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the Department at least 7 days prior to the refilling of the tank. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Department at least 7 days prior to the refilling. **(40 CFR 60.113b(a)(5))**
2. The permittee shall furnish the Department with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 40 CFR 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3). **(40 CFR 60.115b(1))**
3. The permittee shall keep a record of each required inspection. Each record shall identify the tank on which the inspection was performed and shall contain the date the tank was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). **(40 CFR 60.115b(2))**
4. The permittee shall assure, if any of the conditions described in SC V.2 are detected during the annual visual inspection, a report shall be furnished to the Department within 30 days of the inspection. Each report shall identify the tank, the nature of the defects, and the date the tank was emptied or the nature of and date the repair was made. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the tank cannot be emptied within 45 days, a 30-day extension may be requested from the Department. 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 tank will be emptied as soon as possible. **(40 CFR 60.115b(3))**

#### **VIII. STACK/VENT RESTRICTIONS**

NA

**IX. OTHER REQUIREMENTS**

1. The permittee shall comply with all provisions of the Federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A, and Kb as they apply to FGNSPSTANKS. **(40 CFR Part 60, Subparts A and Kb)**

**The following conditions apply to: FGRULE604TANKS**

**DESCRIPTION:** Two gasoline storage tanks with internal floating roofs.

**Emission Units:** EUTANK101, EUTANK105

**POLLUTION CONTROL EQUIPMENT:**

		<b>Primary seal</b>	<b>Secondary seal</b>
EUTANK101	Internal Floating Roof	Mechanical shoe	Shoe mounted
EUTANK105	Internal Floating Roof, Non-Contact	Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the tank and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.	Vapor mounted

**I. EMISSION LIMITS**

NA

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate FGRULE604TANKS unless a MAP as described in Rule 911(2), for FGRULE604TANKS, is implemented and maintained. The MAP shall, at a minimum, specify the following:

- a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
- b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
- c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1910, R 336.1911)**

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate any tank in FGRULE604TANKS unless each tank is equipped and maintained with a floating cover or roof which rests upon, and is supported by, the liquid being contained and has a closure seal or seals to reduce the space between the cover or roof edge and the vessel wall. The seal or any seal fabric shall not have visible holes, tears, or other nonfunctional openings. **(R 336.1604(1)(b))**
2. The permittee shall assure all openings, except stub drains, in each tank in FGRULE604TANKS is equipped with covers, lids, or seals so that all of the following conditions are met:
  - a) The cover, lid, or seal is in the closed position at all times, except when in actual use. **(R 336.1604(2)(a))**
  - b) Automatic bleeder vents are closed at all times, except when the roof is floated off, or landed on, the roof leg supports. **(R 336.1604(2)(b))**
  - c) Rim vents, if provided, are set at the manufacturer's recommended setting or are set to open when the roof is being floated off the roof leg supports. **(R 336.1604(2)(c))**

**V. TESTING/SAMPLING**

NA

**VI. MONITORING/RECORDKEEPING**

NA

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

NA

**IX. OTHER REQUIREMENTS**

NA

**The following conditions apply Source-Wide to:  
 FGFACILITY**

**DESCRIPTION:** The facility is a bulk petroleum terminal which receives gasoline, distillate, and ethanol fuels via barge/vessel while product leaves the terminal via truck. FGFACILITY includes all process equipment at the source including grand-fathered equipment and exempt equipment.

**EMISSION UNITS:** EULOADRACK, EUTANK87, EUTANK89, EUTANK90, EUTANK91, EUTANK92, EUTANK93, EUTANK99, EUTANK100, EUTANK101, EUTANK102, EUTANK103, EUTANK104, EUTANK105, EUTANK106, EUFUGITIVES

**POLLUTION CONTROL EQUIPMENT:**

EULOADRACK	Vapor recovery unit (VRU), includes a Carbon Adsorption System		
		<b>Primary seal</b>	<b>Secondary seal</b>
EUTANK101	Internal Floating Roof	Mechanical shoe	Shoe mounted
EUTANK102	Internal Floating Roof	Mechanical shoe	
EUTANK103	Internal Floating Roof	Mechanical shoe	Shoe mounted
EUTANK105	Internal Floating Roof, non-contact	Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the tank and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.	Vapor mounted
EUTANK106	Internal Floating Roof	Mechanical shoe	

**I. EMISSION LIMITS**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. VOCs	30 tpy	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	SC VI.2	<b>R 336.1205(3)</b>
2. Each Individual HAP	1.0 tpy	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	SC VI.2	<b>R 336.1205(3)</b>
3. Aggregate HAPs	2.0 tpy	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	SC VI.2	<b>R 336.1205(3)</b>

**II. MATERIAL LIMITS**

<b>Material</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. Gasoline	161,330,400 gallons	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	VI.1	<b>R 336.1205(3)</b>
2. Distillate	600,000,000 gallons	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	VI.1	<b>R 336.1205(3)</b>

**III. PROCESS/OPERATIONAL RESTRICTIONS**

NA

**IV. DESIGN/EQUIPMENT PARAMETERS**

NA

**V. TESTING/SAMPLING**

NA

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep records in gallons of the throughput of gasoline and distillate for each calendar month and 12-month rolling time period. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3))**

2. The permittee shall calculate the VOC, individual HAP, and total HAP emission rates from FGFACILITY for each calendar month and 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3))**

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

NA

**IX. OTHER REQUIREMENTS**

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A, and Subpart BBBBBB they apply to FGFACILITY. **(40 CFR Part 63, Subparts A and BBBBBB)**