DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

B918139679

FACILITY: Sunoco Partners Marketing & Terminals LP - Owosso		**SRN / ID:** B9181
LOCATION: 4004 W Main St, OWOSSO		**DISTRICT:** Lansing
CITY: OWOSSO		**COUNTY:** SHIAWASSEE
CONTACT: Lisa Fishbeck , Environmental Specialist		**ACTIVITY DATE:** 04/19/2017
STAFF: Julie Brunner	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Scheduled Compliance Inspection - PTI 27-04		
RESOLVED COMPLAINTS:		

On April 19, 2017, I conducted a scheduled inspection of Sunoco Partners Marketing & Terminals LP, Owosso Terminal (B9181). The inspection is part of a Full Compliance Evaluation (FCE). The last compliance inspection of the facility was performed on June 4, 2014.

Facility Address:
4004 W. Main St., Owosso, Michigan

Inspection Date and Times: April 19, 2017
Arrived: 9:00 AM
Departed: 12:30 PM

Weather:
61°F, wind SW@9 MPH, UV Index Low

Contacts:
Lisa Fishbeck, Environmental Specialist, 29120 Wilk Road, Romulus, MI, office: 734-947-1784, lrfishbeck@sunocologistics.com

Facility Description:
Sunoco Partners Marketing & Terminals LP, Owosso Terminal (Sunoco) is a bulk gasoline storage distribution terminal located on the west side of town off of Main Street (M-21) in Owosso in a rural and commercial / light industrial area. The facility is an existing petroleum bulk terminal consisting of the truck loading rack with a vapor recovery unit (VRU) for control and a vapor combustion unit (VCU) for backup, and numerous above ground storage tanks. Petroleum products are received by pipeline, and typically include gasoline, No. 2 fuel oil, ~~kerosene~~, and ethanol.

5/22/17
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The facility is a synthetic minor for emissions of volatile organic compounds (VOC) and hazardous air pollutants (HAPs) with opt-out limits of less than 100 tons per year (tpy) for VOC, and less than 10 tpy of any single HAP and 25 tpy of aggregate HAPs. The facility has opted out of the Title V - Renewable Operating Permit (ROP) Program and any applicable federal standards with the permitted restrictions on emissions of VOC and HAPs at greater than 90% of thresholds.

Commencement of Mfg. Operations: 1959

Plant Capacity: Maximum allowed throughput of gasoline is 249,437,000 gallons per 12-month rolling time period with a potential to emit (PTE) based on 100 tank turns per year of petroleum products.

Staff #: 4 Shifts/Day: 2 (8-hr shifts) Days of Operation/Week: Manned 5 days/week (truck loading is 24/7)

Boilers? Yes - Two (2) fuel oil-fired boilers:
Weil-McLain hot water boiler, 0.336 MMBtu/hr, Serial No. M351076, Date of Manufacture: 1988 (back-up)
Weil-McLain hot water boiler, 0.295 MMBtu/hr, Serial No. M427086, Date of Manufacture: 2010 (primary)

Exempt per Rule 282(2)(b)(ii) and with each having a 120 gallon hot water heater/boiler with heat input capacity of less than 1.6 MMBtu/hr are also not subject to 40 CFR 63, Subpart JJJJJJ. The facility is looking into removing the boilers as natural gas heaters are used to heat the garage.

emailed 5/19/17, edited & emailed 5/22/17 - JLB

Emergency Generators? No

Cold Cleaners? Yes Label(s) provided.

EUCOLDCLEAN: 3.5 gallon parts washer which uses mineral spirits, lid was closed and reservoir was dry. Exempt per Rule 281(2)(h).

Additional Exempt Equipment:
60,000 gallon pressurized storage tank for butane, exempt per Rule 284(2)(j).
Two 1.4 million gallon ultra low sulfur diesel (ULSD) storage tanks, cone, fixed roof; and one 63,000 gallon transmix tank with an internal floating roof (IFR). All exempt per Rule 290.

Oil/water separator exempt per Rule 290.

There are five (5) gasoline and diesel additive tanks that are operated as exempt per Rule 290 along with a green double walled heating oil (HO) tank.

List of Active Air Use Permits:
PTI 27-04 for loading and storing petroleum products, and a VOC and HAPs opt-out.

VRU installed in 2011/2012 under exemption Rule 285(2)(d). The permit contains requirements for a thermal oxidizer (VCU) that is used for back-up.

Permitted Emission Units (EU) and Flexible Groups (FG) -

Emission Unit (EU) / Flexible Group (FG) ID	Description	Applicable Requirements
EUADDITIVETANK#9	238 barrel horizontal gasoline additive storage tank with a conservation vent	Rule 205(1)(a) and (b)
EUGASLOADING	Gasoline truck loading rack utilizing bottom loading and a thermal oxidizer to control emissions	Rule 205(1)(a) and (b); Rule 609(2); Rule 627; Rule 910; Methods in 40 CFR 60, Subpart XX used for testing
EUTANK#3	36,000 barrel above ground internal floating roof storage tank	Rule 205(1)(a) and (b); Rule 702(a) and (d)
EUTANK#5	25,000 barrel above ground internal floating roof storage tank	Rule 205(1)(a) and (b); Rule 604; Rule 702(d); Notice of inspection (3/1 to 5/1/2016) per the requirements of 40 CFR 63, Subpart WW sent
EUTANK#6	35,000 barrel above ground internal floating roof storage tank	Rule 205(1)(a) and (b); Rule 604; Rule 702(d)
EUTANK#7	35,000 barrel above ground internal floating roof storage tank	Rule 205(1)(a) and (b); Rule 604; Rule 702(d)
EUTANK#8	40,000 barrel above ground internal floating roof storage tank	Rule 205(1)(a) and (b); Rule 604; Rule 702(d)
FGTANKS	Flexible group for EUTANK#3, EUTANK#5, EUTANK#6, EUTANK#7, and EUTANK#8	Rule 205(1)(a) and (b); Rule 604; Rule 702(d)
FGFACILITY	All process equipment at the facility including	Rule 205(1)(a) and

discussed followed by the yard inspection/tour.

A program called TopTech tracks facility petroleum loading. Each tanker truck driver has a card that is scanned and the amount of petroleum product that is loaded is recorded. The data is uploaded monthly. In the last year, the facility loaded approximately 74 million gallons of gasoline and additive, 8.2 million gallons of ethanol, and 15.8 million gallons of diesel.

There are three covered bays with five active loading positions for petroleum loading. Vapors from the loading of gasoline are controlled by a carbon adsorption VRU. The VRU was installed in 2012 using permit exemption Rule 285(2)(d). The VRU replaced the VCU which was installed in the early ~~1980's~~ 2000, and is now used for backup. The VRU operates 9[illegible]% of the time to collect organic vapors emitted from the bottom of the tank during truck loading. The process consists of two (2) carbon absorption beds which continually cycle and regenerate every 15 minutes. The organic vapors are desorbed from the carbon, condensed, and reabsorbed into the process. There is a bypass stack and a bypass switch to go from the VRU to the VRC. A VOC CEMS is used to monitor the performance of the VRU. The VRU and CEMS are not on PTI 27-04. The process/operational restrictions, design/equipment parameters, monitoring and recordkeeping on PTI 27-04 need to be updated to match what is currently used to demonstrate compliance.

See "other"

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EU ID	Install Date	Description	Notes:
EUGASLOADING	**1959**	**6 loading racks:** **Rack 1 – gasoline** **Rack 2 – not used** **Rack 3 – transmix** **Rack 4 – gasoline** **Rack 5 – diesel** **Rack 6 – diesel**	**VRU and VRC were lasted tested in 2014 with testing to be repeated in 2019.** **Spill protection and trench drains in the bay area. An oil/water separator system is located east of the loading rack with the outfall by the road. Little to no evidence of spills or leaks.** **CEMS readout on the panel:** **<5% propane with emission of 0.01%;** **On a 1-hr rolling average it was showing 0.04% propane**

In the bays, product transport lines are clearly marked. The interlocking system and vapor tight collection lines are computer monitored to prevent leaks and spills. A trench drain in the bays collects any drips which go to an oil/water separator. The water goes to the outfall as allowed under a NPDES permit.

A technician maintains the vapor control systems. There are quarterly preventative maintenance (PM) checks on the VRU, semi-annual PMs on the VCU, and monthly leak tests. There have been no malfunctions of the control system in the last couple of years. The preventative maintenance required in Special Condition (SC) 1.4 is completed. The records required by SC 1.11 are well kept.

Monthly smell logs and "sniff" tests are completed for leak detection, and include the loading rack, terminal yard, and vapor recovery area. A note on the logs indicates that leaks are to be repaired with 5 days and/or must be completed within 15 days. The equipment used for the "sniff" test was last calibrated on 2-20-17 and the next calibration was noted as due on May 21st.

A sign is posted on the racks with written procedures for the operation per SC 1.2.

No compliance issues were observed during the inspection of the loading rack and control equipment. The vapor collection system and liquid filling equipment were all competent. This process appears to be in compliance with the requirements of Rule 609, Rule 627, and Rule 910.

The following is a list of tanks in the yard:

EU ID	Install	Description	Notes:

	equipment covered by other permits, grand-fathered equipment and exempt equipment.	(b); 40 CFR 63, Subpart BBBBBB

Applicable Regulations Review:
40 CFR 60, Subpart XX – Standards of Performance for Bulk Gasoline Terminals:

§60.500 Applicability and designation of affected facility.
(a) The affected facility to which the provisions of this subpart apply is the total of all the loading racks at a bulk gasoline terminal which deliver liquid product into gasoline tank trucks.
(b) Each facility under paragraph (a) of this section, the construction or modification of which is commenced after December 17, 1980, is subject to the provisions of this subpart.
(c) For purposes of this subpart, any replacement of components of an existing facility, described in paragraph (a) of this section, commenced before August 18, 1983 in order to comply with any emission standard adopted by a State or political subdivision thereof will not be considered a reconstruction under the provisions of 40 CFR 60.15.

§60.502 Standard for Volatile Organic Compound (VOC) emissions from bulk gasoline terminals.
On and after the date on which §60.8(a) requires a performance test to be completed, the owner or operator of each bulk gasoline terminal containing an affected facility shall comply with the requirements of this section.
(a) Each affected facility shall be equipped with a vapor collection system designed to collect the total organic compounds vapors displaced from tank trucks during product loading.
(b) The emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline tank trucks are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded, except as noted in paragraph (c) of this section.
(c) For each affected facility equipped with an existing vapor processing system, the emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline tank trucks are not to exceed 80 milligrams of total organic compounds per liter of gasoline loaded.

Sunoco pre-dates 40 CFR 60, Subpart XX, and is therefore, not subject to any standards of performance for bulk gasoline terminals

40 CFR 63, Subpart BBBBBB – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities (GDGACT):
The terminal is subject as an area source. The state does not have delegation for this standard. All required reporting is submitted to EPA, and the DEQ is copied as a curtesy. The last "Semi-Annual Compliance Report & Notification of Compliance Status" was submitted in January 2017.

Michigan Air Emissions Reporting System (MAERS):
The facility reports emissions to MAERS. The following VOC emissions were reported for 2016 -
EUADDITIVETANK#9 (includes all additive tanks) – 0.053 tpy
EUGASLOADING – 4.5 tpy
EUDISLOADING – 0.11 tpy
EUFUGITIVE – 2.51 tpy
EUTANK#1 – 0.12 tpy
EUTANK#2 – 0.15 tpy
EUTANK#3 – 3.33 tpy
EUTANK#4 – 0.61 tpy
EUTANK#5 – 0.12 tpy
EUTANK#6 – 1.54 tpy
EUTANK#7 – 1.60 tpy
EUTANK#8 – 2.53 tpy
Misc (o/w sep, boiler, HO tank) – 0.043 tpy
Total Facility VOC – 17.2 tpy

Inspection:
When I arrived at ~9:00 am, I detected no odors around the facility. There were no visible emissions from the tanks or any exhaust stack vents. Tanker trucks were continuously being loaded with gasoline or diesel during the inspection.

I was met by Ms. Lisa Fishbeck. The Terminal Manager was at another facility on the day of the inspection. The pre-inspection meeting was conducted and I discussed the purpose of my visit. Facility operations were

	Date		
EUTANK#1	1959	USLD storage tank – 1.4 M gal, cone, fixed roof	Exempt per Rule 290
EUTANK#2	1959	USLD storage tank – 1.4 M gal, cone, fixed roof	Exempt per Rule 290
EUTANK#3	1959	Low grade gas storage tank - 1.4 M gal, IFR	Seal and gape measurement due August 2018
EUTANK#4	1959	Transmix storage tank – 63,000 gallon with IFR.	Exempt per Rule 290
EUTANK#5	1959	Ethanol storage tank – 1.5 M gal, IFR	Out of service – almost ready to return to service, 653 – cleaning, repairs, and seal and gape.
EUTANK#6	1959	Temporary ethanol storage tank – 1.47 M gal, IFR	Seal and gape measurement 2008, will return back to storage of gas when EUTANK#5 is returned to service.
EUTANK#7	1959	High grade gas (Premium 913) storage tank - 1.47 M gal, IFR	Seal and gape measurement 2012
EUTANK#8	1971	Low grade gas storage tank - 1.68 M gal, IFR	Seal and gape measurement 2013
EUADDITIVETANK#9	1990	10,000 gallon gas additive tank, fixed roof	All additive tanks are reported under this emission unit.
EUTANK#11		USLD additive tank, fixed roof	Exempt per Rule 290
EUTANK#12		USLD additive tank, fixed roof	Exempt per Rule 290
EUTANK#13		4136 gallon gas additive tank, fixed roof	Exempt per Rule 290
EUTANK#14		Gas additive tank, fixed roof	Exempt per Rule 290
EUTANK#15		USLD additive tank, fixed roof	Exempt per Rule 290
EUTANK#16	2014	Butane bullet - 60,000 gal pressurized storage tank	Exempt per Rule 284(2)(j). Off-loading and rack blended.
HOTANK#17		Green double walled heating oil (HO) tank	Exempt per Rule 290

A full API 653 is completed every 20 years on the tanks which include cleaning, inspection and repairs. Seal gape measurements per GDGACT are completed every 10 years and annual visual inspections of the tanks are completed as required by SC 3.3. Records as required by SC 3.4 are maintained.

A walk through inspection around the tanks in the yard was conducted. There was no visible sheen on any standing water in the yard, and no visible leaks or odors were detected around piping or tanks. Some wind damage to roof protections on one tank is scheduled to be repaired soon.

Records Review:
Electronic records and calculations were viewed while on-site. An electronic copy of the records was later emailed and a paper copy of the "March 2017 Throughputs and Emission Recordkeeping" is attached to this inspection report.

Paper copies of the following records were obtained while on-site:
1. Monthly test, sound & smell log from 1-3-17 to 4-17-17
2. Terminal "sniff" test from 1/17/17 to 3/16/17

3. Vapor Control Maintenance and Repair Log from 9-2-2016 to 4-17-2017
4. Quarterly Preventative Maintenance Inspections for VRU for the 3rd and 4th quarter of 2016 and the 1st quarter of 2017.
5. Preventative Maintenance Inspections for VCU for the 2nd and 4th quarter of 2016.
6. Continuous Emissions Monitor Quarterly Worksheets.

The throughput of petroleum and ethanol products loaded for the 12-month rolling at the end of March is as follows:
Gasoline + ethanol – 89,468,141 gallons
Distillate – 16,834,421 gallons

The throughput and VOC emissions for the 12-month rolling at the end of March from EUTANK#3 were as follows:
Gas throughput – 37,127,884 gallons < 144,303,200 gallons (SC 2.2)
VOC – 3.331* tpy < 4.8 tpy (SC 2.1a)
* 2016 MAERS reporting (upgrading data system to calculate 12-rolling per emission unit in progress)

For FGFACILITY, the gas throughput and emissions for the 12-month rolling at the end of March were as follows:
Gas throughput – 79,925,168 gallons < 249,437,000 gallons (SC 4.2)
VOC – 18.74 tpy < 100 tpy (SC 4.1c)
Single HAP (hexane) – 0.20 tpy < 10 tpy (SC 4.1a)
Total HAPS – 0.72 tpy < 25 tpy (SC 4.1b)

All gas throughput and emissions are below the permit limits in PTI 27-04.

Summary:
I briefly discussed my observations with Lisa before departing. The facility appeared to be in compliance with the applicable rules and regulations, and PTI 27-04. I did recommend documenting and/or generating a complete list of all exempt equipment including the applicable exemption rule.

Some cleanup of the existing permitting is needed as PTI 27-04 is rather dated. This was discussed with Lisa that a PTI application to modify the permit conditions to include the VRU, and update the testing and monitoring for the CEMS is recommended. Maybe add a Malfunction Abatement Plan (MAP) requirement to the permit that consolidates the preventative maintenance requirements that are scattered throughout the permit.

NAME Judith T. Brown DATE 5/8/17 SUPERVISOR B. M.