

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

B475230576

FACILITY: Great Lakes Petroleum Terminal, LLC		SRN / ID: B4752
LOCATION: 12500 STOCKER RD, DETROIT		DISTRICT: Detroit
CITY: DETROIT		COUNTY: WAYNE
CONTACT: Jack Stevens , Plant Leader		ACTIVITY DATE: 10/01/2014
STAFF: Jorge Acevedo	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Joint Inspection with US EPA		
RESOLVED COMPLAINTS:		

COMPANY NAME : Great Lakes Petroleum

FACILITY ADDRESS : 12500 Stocker Road
 STATE REGISTRAT. NUMBER : B4752
 SIC CODE :
 EPA SOURCE CLASS : B
 EPA POLLUTANT CLASS : O
 LEVEL OF INSPECTION : PCE
 DATE OF INSPECTION : 10/1/14
 TIME OF INSPECTION :
 DATE OF REPORT : 8/14/15
 REASON FOR INSPECTION : Self Initiated
 INSPECTED BY : Jorge Acevedo(author) Constantinos Loukeris (USEPA), Katharina Bellairs(USEPA)
 PERSONNEL PRESENT : Jack Stevens, Mike Homer
 FACILITY PHONE NUMBER :
 FACILITY FAX NUMBER :

FACILITY BACKGROUND

Great Lakes Petroleum is an asphalt cement storage terminal. The facility is North of I75(Fisher Freeway), South and West of the Rouge River , East of Fort St. in Detroit.

INSPECTION NARRATIVE:

On October 1, 2014, I accompanied an inspection performed by representatives of the United States Environmental Protection Agency- Constantinos Loukeris and Katharina Bellairs. We arrived at the facility at approximately 12:30PM. I did not detect any asphalt odors.

We met with Mark Homer and Jack Stevens. We explained the purpose of my visit. Mr. Loukeris and Ms. Bellairs were interested in observing the storage tanks at the facility with a PID and infrared(IR) camera. Mr. Stevens and Mr. Homer explained the facility and the process to the USEPA Inspectors. Mr. Stevens explained the control devices including the carbon bed and vapor recovery system.

We walked to the entrance of the facility. I observed the six inch lines which bring asphalt cement from the Marathon Refinery to Great Lakes Petroleum. I observed Tank 27, which was one of the tanks from the old Owens Corning facility that Great Lakes Petroleum decided to keep. Tank 27 was empty as explained by Mr. Stevens. It had been empty for some time. I observed the vapor condensation and recovery system. The vapor condensation and recovery system is on the largest tanks. The system consists of a pipe affixed to the top of the tank in connection with the tank's vapor space. The pipe extend vertical for a few feet above the tank, jogs horizontal for a few feet to clear the tank's outside diameter, and then drops vertical to meet the opening of a plastic tote. The pipe actually goes into a 55 gallon drum placed in the tote. The tote serves as a somewhat secondary containment. Asphalt vapors

at about 300°F rise into the pipe, cool and condense, and collect as a liquid into the tote below.

Next, we observed Tanks 60-1, 60-4 and 60-2. Mr. Loukeris and Ms. Bellairs used the IR camera and VOC sniffer and went to the top of the tanks. Emissions were observed through the IR camera on Tanks 60-4 and 60-2. The manways were the source of emissions. We observed the eight smaller tanks, which are connected to a filter before going through carbon. We observed two CECO units. Each CECO unit has two carbon units in series and service four tanks. Oil is removed from the filter as part of preventative maintenance. The pre filter is cleaned monthly. We observed the loading racks and the boilers used to provide heat for the storage tanks.

We concluded the inspection at 3:25PM

Kathleen Anderson, consultant for Great Lakes Petroleum submitted records required by the PTI and requested by Mr. Loukeris and Ms. Bellairs on October 2, 2014.

COMPLAINT/COMPLIANCE HISTORY:

There have not been any citizen complaints registered against Great Lakes Petroleum.

OUTSTANDING CONSENT ORDERS:

None

OUTSTANDING LOVs

None

OPERATING SCHEDULE/PRODUCTION RATE:

Great Lakes Petroleum operates five days a week.

PROCESS DESCRIPTION

Great Lakes Petroleum operates an asphalt cement storage area.

EQUIPMENT AND PROCESS CONTROLS:

Four 2,590,000 gallon storage tanks.

Twelve storage tanks ranging from 61,200 gallons to 2,169,000 gallons.

Two 5,250,000 gallon storage tanks

Two Boilers - 14,700,000 BTU/hr heat input

Two AC Heaters <10,000,000 BTU/hr heat input

Liquid asphalt barge loading/unloading station

Liquid asphalt railcar loading/unloading station

Liquid asphalt truck loading/unloading rack.

APPLICABLE RULES/PERMIT CONDITIONS:

Great Lakes Petroleum is currently operating under 153-09B.

153-09B Permit Conditions.

The following conditions apply to: FGSTORAGE&HNDLNG

DESCRIPTION: Asphalt cement storage tanks having emissions control, loading racks for barges,

railcars, and/or trucks loading and unloading operations, and ancillary equipment.

Emission Units: EU60-1, EU60-2, EU60-3, EU60-4, EU010, EU015, EU016, EU017, EU018, EU019, EU020, EU021, EU022, EU025, EU026, EU027, EUBARGEUNLOAD, EURAILCARUNLOAD, EUTRUCKLOAD, EU028, EU029

POLLUTION CONTROL EQUIPMENT:

A vapor condensation and recovery system or an equivalent system.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Compliance Status
1. VOC	2.0 tpy	12-month rolling time period as determined at the end of each calendar month	FGSTORAGE&HNDLING	Compliance- Records were received for 2013 and YTD 2014. Records show that the highest 12 month rolling total was less than 0.25 TPY

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Compliance Status
1. Total asphalt cement received into tanks in FGSTORAGE&HNDLING	197,068 tons of asphalt cement per year	12-month rolling time period as determined at the end of each calendar month	FGSTORAGE&HNDLING	Compliance- Records were received for 2013 and YTD 2014. Records show that the highest 12 month rolling total was less than 100,000 TPY

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall maintain and operate the vapor condensation and recovery system, or an equivalent system, according to the procedures outlined in the approved preventative maintenance plan. (R 336.1910, R 336.1911)

Compliance- The vapor condensation and recovery system was installed.

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not store asphalt cement in any tank in FGSTORAGE&HNDLING unless a properly designed and operated vapor condensation system, or an equivalent system, is installed, maintained, and operated in a satisfactory manner. (R 336.1901, R 336.1910)

Compliance- The vapor condensation system was installed and appeared to be working correctly. However, visible emissions were detected with IR camera near the manways.

2. The permittee shall equip and maintain each asphalt cement storage tank in FGSTORAGE&HNDLING with a properly designed and operated vapor condensation and recovery system or an equivalent system. (R 336.1901, R 336.1910)

Compliance- The vapor condensation system was installed on the four larger tanks (60-1, 60-2, 60-3, 60-4) Carbon units were installed for the remaining tanks. Visible emissions were detected with IR camera near the tank manways.

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, in a satisfactory manner, calculations of the VOC emission rate for each month and the 12-month rolling time period, as determined at the end of each calendar month, for FGSTORAGE&HANDLNG. All records shall be kept on file at the facility and made available to the Department upon request. (R 336.1702(a))

Compliance- Records are kept. Records were received following the inspection.

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period, as determined at the end of each calendar month, records of the amount of liquid asphalt cement loaded and unloaded in FGSTORAGE&HANDLNG. All records shall be kept on file at the facility and made available to the Department upon request. (R 336.1225, R 336.1702(a))

Compliance- Records are kept. Calculations were provided at the time of inspection for the period of January 2010 through YTD 2014.

3. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1225, R 336.1702(a))

Compliance- Calculations were done and provided following the inspection.

4. The permittee shall monitor and record the temperature of asphalt cement in each tank at least once per week when the tank temperature set point is less than 300°F. The permittee shall monitor and record the temperature of asphalt cement in each tank at least once per day when the tank temperature set point is greater than or equal to 300°F. If at any time the monitored temperature in any asphalt cement storage tank exceeds 370°F the permittee shall take actions to quickly and safely reduce the temperature of the asphalt cement stored in that tank. The permittee shall keep a record of these actions on file at the facility and make them available to the Department upon request. (R 336.1225, R 336.1702(a), R 336.1901)

Compliance- Records were provided following the inspection. A copy of the daily logs were provided as well. Mr. Stevens demonstrated that the temperature of the tanks were monitored.

5. The permittee shall maintain current Material Safety Data Sheets of the materials stored and handled at the asphalt terminal on file at the facility and make them available to the Department upon request. (R 336.1205, R 336.1225, R 336.1702)

Compliance- MSDS of the asphalt are kept and were provided to USEPA following the inspection.

VII. REPORTING

1. The permittee shall notify the AQD District Supervisor, in writing, of the completion of installation of each tank vapor condensation and recovery system, or equivalent system, within 15 days of installation. (R 336.1201(7)(a))

Compliance- Notification was provided on June 08, 2010.

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

The following conditions apply to: FGBOILERS&HEATRS

DESCRIPTION: Natural gas-fired boilers and heaters used for keeping the asphalt cement at temperatures typically ranging from 280°F to 320°F.

VI. MONITORING/RECORDKEEPING

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

1. For those emission units in FGBOILERS&HEATRS subject to 40 CFR Part 60 Subpart Dc, the permittee shall monitor emissions and operating information in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc. This shall include recordkeeping of the fuels combusted in such boilers or heaters during each calendar month. The permittee shall keep records of all source emissions data and operating information on file at the facility and make them available upon request. (40 CFR 60.48c(a))

Compliance- Records of fuel usage is kept.

VII. REPORTING**IX. OTHER REQUIREMENTS**

1. The permittee shall comply with all applicable provisions of the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, as specified in 40 CFR Part 60 Subparts A and Dc. (40 CFR Part 60, Subparts A and Dc)

Compliance- Both boilers fire on natural gas and keep records of their fuel usage.

APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS:

N/A

MAERS REPORT REVIEW:

N/A

APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS:

N/A

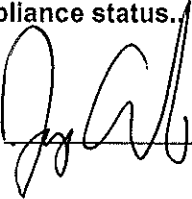
MAERS REPORT REVIEW:

NA

FINAL COMPLIANCE DETERMINATION:

Based on the records provided by the facility, it appears that they are in compliance at this time. A survey of a couple of the storage tanks with the IR camera detected visible emissions near the manways of several tanks. Great Lakes Petroleum is not subject to Leak Detection and Repair regulations. USEPA issued a report(attached) on August 14, 2015 but did not make a determination of the facility's compliance status.

NAME



DATE

5-17-15

SUPERVISOR

W.M.