

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

B907255576

FACILITY: MPLX Terminals LLC - North Muskegon Terminal		SRN / ID: B9072
LOCATION: 3005 HOLTON RD, N MUSKEGON		DISTRICT: Grand Rapids
CITY: N MUSKEGON		COUNTY: MUSKEGON
CONTACT: Victor Brzeg , Advanced HES Professional		ACTIVITY DATE: 09/04/2020
STAFF: Scott Evans	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Air Permit compliance inspection		
RESOLVED COMPLAINTS:		

Introduction

On Friday, September 4, 2020, AQD staff Scott Evans (SE) conducted a scheduled, announced, air quality inspection of the Marathon Petroleum Company, LLC (MPLX) facility located at 3005 Holton Road in North Muskegon, Michigan. This was an announced inspection in order to ensure necessary staff were present and proper safety requirements could be met during the inspection through the ongoing COVID-19 pandemic.

This MPLX facility is a fuel storage and distribution station. It consists of multiple large storage tanks where different types and grades of fuel are stored. It also functions as a blending facility in which different fuel additives can be added to produce the different grades of fuel stored on site. This fuel is then transferred to shipment trucks through a five-lane rack system. All permitted equipment is covered by opt-out Permit To Install (PTI) No. 303-01A.

Upon arrival at the facility, SE observed no visible emissions from the facility and any odors were intermittent gasoline odors. SE was greeted by Advanced HES Professional Victor Brzeg (VB) and Terminal Manager Shane Cappama (SC). After brief introductions with the facility staff, proper PPE for both location facility and pandemic spread prevention were donned and a visual, walking inspection was conducted. All records were provided and reviewed remotely at a later date to further reduce risk of spreading the COVID-19 virus.

PTI No. 303-01A

This permit was approved on May 30, 2007. It includes 13 Emission Units as listed below:

- EURACKS – 5-lane truck loading rack with Vapor Recovery Unit (VRU) and two Vapor Combustion Units (VCUs).
- EU20-8 – Internal floating roof storage tank.
- EU35-4 – Internal floating roof storage tank.
- EU40-11 – Internal floating roof storage tank.
- EU80-2 – Internal floating roof storage tank.
- EU80-3 – Internal floating roof storage tank.
- EU80-9 – Internal floating roof storage tank.
- EU80-10 – Internal floating roof storage tank.
- EUO-84-13 – Internal floating roof storage tank.
- EUT-7 – Internal floating roof storage tank.
- EU-SVE1 – 170 ACFM blower and air flow distribution system (ID “Celery Lane”)
- EU-SVE2 – 200 ACFM blower and air flow distribution system (ID “Loading Rack/Tank Farm System”)

The permit also includes three flexible groups as listed below:

- FG-IFRTANKS – Includes all internal floating roof storage tanks.
- FGFACILITY – Includes all equipment at facility including equipment in other permits, grandfathered equipment, and exempt equipment.
- FG-REMEDIATION – Includes EU-SVE1 and EU-SVE2.

EURACKS

This emission unit has four emission limits as listed below:

- 23.5 tons per year (tpy) of Volatile Organic Compounds (VOCs) through VRU and VCUs.
- 10 mg/liter of gasoline loaded of VOCs through VRU and VCUs.
- 22 tpy of VOCs as fugitive emissions.
- 9 mg/liter of gasoline loaded of VOCs as fugitive emissions.

To track and record the above emissions, the following equation is required to be used as outlined in PTI No. 303-01A:

$$\text{VRU} * 0.109 + \text{Rane} * 0.151 + \text{Zink} * 0.0133 \leq 1.34$$

Where:

VRU = VOC emissions, in tons, from the VRU for the current 12-month rolling time period,

Rane = VOC emissions, in tons, from the Rane VCU for the current 12-month rolling time period, determined assuming an emission rate of 10 mg per Liter of gasoline loaded or determined from emission testing data, and

Zink = VOC emissions, in tons, from the Zink VCU for the current 12-month rolling time period, determined assuming an emission rate of 10 mg per Liter of gasoline loaded or determined from emission testing data.

This emission unit also has two material usage limits as listed below:

- 550,000,000 gallons of gasoline and ethanol per 12-month rolling time period.
- 150,000,000 gallons of distillate per 12-month rolling time period.

Below is an assessment of the above emission and material limits as assessed through review of provided records:

- Controlled VOCs (Limit 23.5 tpy)
 - o 0.118 tpy as of August 2020
 - o In compliance.
- Gasoline and ethanol Throughput (limit 550,000,000 gal per 12-month rolling annual)
 - o 384,560,295 gal as of August 2019
 - o In compliance
- Controlled VOCs per loaded gasoline (limit 10 mg/l)
 - o ~0.064 mg/l as of August 2020
 - o In compliance
- Fugitive VOCs (limit 22 tpy)
 - o 13.1 tpy as of August 2020
 - o In compliance
- Fugitive VOCs per loaded gasoline (limit 9 mg/l)
 - o ~6.9 mg/l as of August 2020
 - o In compliance
- Distillate Throughput (limit 150,000,000 gal per 12-month rolling annual)
 - o 68,171,388 gal as of August 2020
 - o In Compliance

The facility is required as a bulk gasoline storage facility to comply with New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart XX. As required by the NSPS a currently applicable Malfunction Abatement Plan (MAP) was maintained at the facility as well as all required records regarding malfunctions and testing. These records were available for review during the records review portion of the inspection. These records demonstrated adherence to the on-file MAP as well as compliance with Rule 607.

As is required in the permit, vapor tight collection lines were present and in use during the inspection. This was observed during the inspection as multiple trucks passed through the rack system during the inspection. These lines directed vapors through the VRU and VCUs as expected, which could be observed through operational gauges during the inspection. This observation confirmed compliance with Rule 706 as a facility loading more than 5,000,000 gallons of fuel per year.

The facility is required to conduct an annual Relative Accuracy Test Audit (RATA) on the VOC monitor for the VRU. This test was completed on June 23, 2020. The facility is also required to conduct VOC emission testing once every five years. Most recently, this testing was completed on October 26, 2017.

In addition to the records used to assess the emission and material limits above, there were additional records required to be maintained by the facility. Below is an outline of those required records and an assessment of compliance:

- Hours of VCU operation
 - o No hours of operation reported.
- Gas loaded during VCU operation
 - o Not applicable
- VOC emissions during VCU operation
 - o Not applicable
- Demonstration that required equation is in use
 - o Equation utilized in records matches permit.

- Appropriate leak testing for delivery vessels
 - o Worksheets viewed during inspection
- Maintenance records
 - o Records and function worksheet observed during inspection
- Malfunction Records
 - o No malfunctions reported

The facility appeared to be compliant with all above records requirements.

Though the stacks located on the rack system were not directly measured, they appeared to be compliant with the permit requirements during the inspection.

FG-IFRTANKS

This flexible group includes all internal floating roof storage tanks on site. There is one emission limit and one material usage limit included in this flexible group. They are listed below:

- 33.1 tpy of VOCs (12-month rolling)
- 550,000,000 gal/yr throughput of gasoline and ethanol (12-month rolling)

Records were provided as requested and the below assessments were made of the above limits:

- VOC emissions (limit 33.1 tpy 12-month rolling)
 - o ~17 tpy as of August 2020
 - o In compliance
- Gasoline and Ethanol Throughput
 - o 389,043,418 gal as of August 2020
 - o In Compliance

In addition to the above records, the facility is required to keep inspection records of the tanks as is required by New Source Performance Standard (NSPS) 40 CFR Part 60 Subparts A and Kb. Maintenance records were maintained on site and reviewed during the inspection.

Inspection of the tanks confirmed compliance with part 6 and part 7 rules regarding tank and tank line construction and operation. Specific applicable rules include Rules 604, 607, 624, and 704.

FG-REMEDATION

This flexible group for soil vapor extraction includes the emission units SVE1 and SVE2. This flexible group has one emission limit included: 5 tpy of VOCs on a 12-month rolling time period. During the inspection it was explained that SVE1 and SVE2 were not presently in operation. As such, the provided records showed 0 tpy of VOC emissions on a 12-month rolling time period for each month of the requested records. This is compliant with the limit of 5 tpy.

FGFACILITY

This flexible group includes all equipment at the facility including equipment in other permits, grandfathered equipment, and exempt equipment. This flexible group includes two emission limits as listed below to opt the source out of Title V permitting:

- 85.5 tpy of VOCs (12-month rolling)
- 6 tpy of Total Hazardous Air Pollutants (HAPs) (12-month rolling)

Records were provided and the following compliance assessment of the emission limits was made:

- VOCs (limit 85.5 tpy 12-month rolling)
 - o 31.82 tpy as of August 2020
 - o In compliance
- Total HAPs (limit 6 tpy 12-month rolling)
 - o 1.6 tpy as of August 2020
 - o In compliance

Exempt and Other Equipment

The facility had only one piece of exempt equipment on site: a diesel-fired, fire pump engine. This unit was installed in 2015. This unit is subject to both NSPS 40 CFR Part 60 Subpart IIII and National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart ZZZZ. Documentation was provided for the unit that demonstrated it is an engine that is certified compliant with EPA standards. This certification demonstrates compliance with NSPS 40 CFR Part 60 Subpart IIII. This unit is also compliant with NESHAP 40 CFR Part 63 Subpart ZZZZ through demonstration of compliance with NSPS 40 CFR Part 60 Subpart IIII.

Conclusions

At the conclusion of the inspection, the facility appeared to be compliant with all conditions of PTI No. 303-01A and all other applicable air quality requirements.

NAME Scott EvansDATE 9/30/2020SUPERVISOR PHH