

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

B907235207

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: Rick Vermeesch , Terminal Manager		ACTIVITY DATE: 06/22/2016
STAFF: Kaitlyn DeVries	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: The purpose of this inspection was to observe the RATA and to determine compliance with PTI No. XX and all other applicable Air Quality Rules and Regulations.		
RESOLVED COMPLAINTS:		

On Wednesday June 22, 2016 AQD Staff Kaitlyn DeVries (KD) conducted an unannounced, scheduled inspection of MPLX Terminals LLC – North Muskegon Terminal located at 3005 Holton Rd, North Muskegon, Michigan. The purpose of this inspection was to determine compliance with PTI No. 303-01A and all other applicable Air Quality Rules and Regulations. In addition to the inspection, a Relative Accuracy Test Audit (RATA) was being done that day.

KD arrived on site at approximately 9:00 am. Jeremy Howe, AQD-TPU (JH) was also just arriving on site for the scheduled RATA testing; please reference CA_B907235211 for further details on the RATA. AQD Staff met with Mr. Rick Vermeesch, Terminal Manager, and Mr. Derrick Michael, Operator, who escorted staff on a tour of the terminal. KD presented Mr. Vermeesch with the Environmental Rights and Responsibilities pamphlet, which was briefly discussed. After a tour of the facility and brief discussion about the required records, KD and JH proceeded to the trailer to observe the RATA. KD left the facility at approximately 12:00 pm.

Facility Description

MPLX Terminals, LLC – North Muskegon Terminal (MPLX) is a gas terminal that obtains petroleum products from a pipeline and distributes the product via truck to retail gas stations. Several different types of product are transported via the pipeline and include different varieties of gasoline and diesel fuel. Ethanol is also delivered, but via truck instead of pipeline. MPLX was formerly called Marathon Petroleum Corporation, and is still associated with Marathon as MPLX and Marathon have formed a partnership. All staff located on site are employed by Marathon. The site operates 24 hours a day, 7 days a week. Per Mr. Vermeesch, the site is only temporarily shut down when maintenance occurs. They typically have at least five (5) employees on site at a time to operate the terminal.

Regulatory Analysis

MPLX currently only holds one (1) permit, PTI No. 303-01A. This permit is an opt-out permit for Volatile Organic Compounds (VOC's) and Hazardous Air Pollutants (HAP's). Additionally, MPLX is subject to several federal regulations including 40 CFR Part 60 Subpart XX for Bulk Gasoline Terminals, 40 CFR Part 60 Subpart Kb for Volatile Organic Liquid Storage Vessels, and 40 CFR Part 63 Subpart BBBBBB for Gasoline Distribution Bulk Terminals. Currently, Michigan is not delegated for Subpart BBBBBB; thus these conditions will not be further reviewed. However, it appears as if MPLX has been submitting the required Compliance Notifications. The NSPS Subparts XX and Kb conditions are written into the permit and will be evaluated as such.

Compliance Evaluation

EU-RACKS

This emission unit is the five (5) lane terminal loading rack with a carbon adsorption vapor recovery unit and two back up portable vapor combustion units. The Rane VCU and the Zink VCU (both portable) were not in use at the time of the inspection, and have not been used in the past 12 months. Even though these units have not been in use for a while, MPLX is tracking the usage of each portable VCU, emission rate from each VCU, and the hours of operation for the VCU; they indicate zero (0). The stack dimension for the VRU, while not explicitly measured, appeared to be correct. Since the other two units, Rane and Zink, are portable and not on site, the dimensions were not verified.

A RATA was being done during the time of the inspection, as required once per calendar year. At the time of this report, test results were not yet available. Stack testing from EURACKS is required once every five (5)

years and was most recently done in 2012.

Upon inspection, the VRU was properly equipped with a continuous digital monitor for VOC concentration in percent by weight. At the time of the inspection the Non-Methane Hydrocarbons (NMHC) was at 0.01%, Methane (CH₄) at 0.15%, and Total Hydrocarbons (THC) 0.11 %. The data here was consistent with what was going on in the trailer for the RATA. MPLX has alarms and notifications if anything is outside of range. The unit will subsequently shut down as any excess emission is losing sellable product.

MPLX is properly tracking the throughput of gasoline and ethanol, and distillate. The distillate throughput is limited to 150,000,000 gallons per year, 12-month rolling. As of May 2016 the Distillate throughput was 67,131,576 gallons. The gasoline and ethanol throughput is limited to 550,000,000 gallons per year, 12-month rolling. As of May 2016 the throughput was 384,290,801 gallons. Emissions are also being properly tracked. VOC emissions from EURACKS through the VRU and VCU's is limited to 23.5 tpy, 12-month rolling and 10 mg/l of gasoline loaded based on test protocol. As of May 2016 the 12-month rolling emissions were 24.02 pounds. Additionally, the VOC emissions satisfy the equation outlined in EURACKS Special Condition 1.2 (below). The temporary limit in the permit is no longer applicable.

*VRU current 12mo rolling VOC: $24.20 \text{ lb} = 0.0121 \text{ tons} * 0.109 + 0 \text{ (Rane)} * 0.151 + 0 \text{ (Zink)} * 0.0133 = 0.00132 < 1.34$*

The fugitive VOC emissions from EURACKS is limited to 22 tpy and 9 mg/l of gasoline loaded based on test protocol. As of May 2016 the fugitive VOC emissions were 26,138.4 pounds (13.07 tons).

Vapor control for the loading of the trucks is part of MPLX's procedures and appears to be properly done, and trucks were following all required procedures, including vapor tight collection lines for truck loading. Again, MPLX wants to capture the emissions as the emissions can be put back through the system and is sellable product. Trucks were intermittently loaded throughout the time KD was on site, and there were no apparent issues in the vapor balance system.

KD also asked about the most recent Malfunction Abatement Plan (MAP) for the racks, since the most recent version AQD had was from 2012. MPLX stated they have not updated the MAP since then, but provided KD with a copy anyhow. The MAP adequately outlines recordkeeping, maintenance and operating procedures, and corrective action procedures in the event of a malfunction and all requirements of NSPS XX. Mr. Vermeesch stated that they have not had any malfunctions during the last 12 months, and probably even longer than that. MPLX is properly tracking maintenance done on the Vapor Recovery Unit; attached is an example of maintenance records for work done. The preventative maintenance plan in place allows for tracking of replacement parts through that system.

FG-IFRTANKS

This flexible group covers ten (10) storage tanks with deck and seal configuration; all of the tanks have an internal floating roof with either a welded or bolted deck, or a mechanical shoe or vapor mounted primary seal. Tank EU80-3, the only vapor mounted tank, was taken out of service in April 2012, and fully removed in early 2015. KD was able to observe the former location of the tank, which does not have anything in its place. The contents of the tanks vary from tank to tank. Many of the tanks hold regular gasoline, premium gasoline, or diesel gasoline. One tank is used for slop, and houses settled product that will be sent back to the refinery for additional processing. One of the tanks, an ethanol tank, appeared to be covered with black mildew. Mr. Michael explained that this is a common issue with storing ethanol. This issue was also noted in the previous inspection.

Each tank is subject to the provisions of Rules 604, 607 and/or 624, and 704 as well as NSPS Kb. Based on a review of the rules, the provisions of the rules appear to be met. Additionally, many of the provisions outlined in NSPS Kb are written into the permit and are also being met. Attached are various tank inspection reports, as required.

Gasoline and ethanol throughput is limited to 550,000,000 gallons, 12-month rolling. As of May 2016 the throughput was 380,907,571.0 gallons. VOC's from the tanks are limited to 33.1 tpy, 12-month rolling. As of May 2016, the VOC emissions were 30,368.0 lbs (15.2 tons).

FG-REMEDIATION

Per Mr. Michael, these systems used to be onsite but has since been discontinued, and removed from the site. He states that it was removed approximately four (4) years ago. According to AQD's last inspection in 2012, the remediation systems were not even in use at that time, therefore subsequently removed. The systems had a VOC emission limit of 5 tpy. Since this is still in the permit, MPLX is still tracking the emissions but they are zero (0), since the systems have been removed.

FG-FACILITY

The terminal has a site wide VOC emission limit of 85.5 tpy, and as of May 2016 the 12-month rolling VOC emissions were 63,296.4 lbs (31.65 tons). Additionally, total HAP's are limited to 6 tpy. As of May 2016 the 12-month rolling emissions were 3,269.2 lbs (1.6 tons). All emission data appears to be kept in a satisfactory manner.

Additionally, the emissions reported for the inspection are consistent with what was reported for the 2015 MAERS report.

Miscellaneous

MPLX installed a butane system that offloads butane and then injects the butane into the system in 2015. The system includes two (2) 60,000 gallon above ground pressurized storage tanks. MPLX submitted an exemption determination for the offloading, transfer, and blending the butane. The exemption determination, supplied to AQD in January 2015, outlines the exemption information for the use of Rule 284 (j). This Rule 201 permitting exemption is indeed applicable, and this process is exempt from Rule 201 under Rule 284 (j).

Compliance Determination

Based on the observations made during the time of the inspection and a subsequent review of the records, it appears as if MPLX Terminals LLC – North Muskegon Terminal, is in compliance with PTI No. 303-01A and all other applicable Air Quality Rules and Regulations.

NAME



DATE

7/5/2016

SUPERVISOR

