

M2363
MAWKA

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

M236349754

FACILITY: Marathon Pipe Line LLC (Woodhaven)		SRN / ID: M2363
LOCATION: 24400 ALLEN RD, WOODHAVEN		DISTRICT: Detroit
CITY: WOODHAVEN		COUNTY: WAYNE
CONTACT: Jonathan Rupp, Senior HES Professional		ACTIVITY DATE: 08/02/2019
STAFF: Jorge Acevedo	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT:		
RESOLVED COMPLAINTS:		

COMPANY NAME : Marathon Pipe Line LLC
FACILITY ADDRESS : 24400 Allen Road, Woodhaven, MI 48183
STATE REGISTRAT. NUMBER : M2363
SIC CODE :
EPA SOURCE CLASS : A
EPA POLLUTANT CLASS : O
LEVEL OF INSPECTION : PCE
DATE OF INSPECTION : 8/2/19
TIME OF INSPECTION : 1:00 PM
DATE OF REPORT : 9/11/19
REASON FOR INSPECTION : Scheduled
INSPECTED BY : Jorge Acevedo
PERSONNEL PRESENT : Jonathan Rupp
FACILITY PHONE NUMBER : 313-343-3881
FACILITY FAX NUMBER : 313-343-7656

FACILITY BACKGROUND

Marathon Pipe Line, LLC, LPG Transfer and Storage facility (MPL) is located at 24400 Allen Road in Woodhaven, Michigan between West Road and Van Horn Road. The area is predominantly industrial/commercial and the nearest residence is approximately 300 yards south of the facility's property line.

Liquefied petroleum gas (LPG- propane and butane) is received primarily by pipeline and stored in one of eight dedicated underground storage caverns (solution mined salt domes) ranging in volume between 125000 and 400000 barrels. Stored LPG can be transferred offsite via pipeline or tanker trucks. There are two loading lanes for transfer of the LPG (primarily propane) to tanker trucks, one station for trans-mix loading into trucks, one LPG unloading station, two brine storage tanks, two brine ponds, and five horizontal LPG above ground bullet tanks for temporary storage of trans-mix due to multiple products being transferred through the pipeline. The tanker trucks sizes vary from 9,000 gallons to 16,000 gallons. In an average year, the facility receives 40 propane loading trucks per day, with the bulk of them during the winter and fall months.

Ancillary equipment includes an ethyl-mercaptan injection system for "stenching" or odorizing propane loaded on trucks and a dryer to remove moisture from the propane prior to loading.

During periods of LPG transfer to pipelines or tanker trucks, LPG is displaced from the underground caverns by pumping brine stored in on-site ponds into the caverns. During periods of LPG receipt via pipeline, LPG is discharged into the underground caverns and brine is displaced and temporarily stored in two vertical open-top storage tanks (Tanks 34-T4 and 34-T6) prior to the brine being returned to the brine ponds. The brine tanks are used to capture and control hydrocarbons entrained in the brine or in the case of an unanticipated mechanical failure in the wellhead or piping system.

In addition, various relief valves within the facility are routed to the brine tanks to safely control overpressure situations. The brine tanks are equipped with glow coil igniters that float on the brine and serve as a continuous source of ignition should LPG be released in the tanks.

A continually operated gas-assisted stationary stack type flare system was installed at the facility and was put into service on the last quarter of 2012. The new flare includes a pilot flame and knockout drum located directly upstream of the flare stack. Most of the facility's relief devices are routed to the new

flare along with several streams that were previously vented directly to the atmosphere such as the vapors that are released when a loading line is depressurized after being disconnected from a tanker truck. In the event the new flare system is unavailable due to maintenance, collected emissions will be routed to the brine tank glow coil ignition system, which will continue to be used to control emissions from the brine system.

INSPECTION NARRATIVE:

On August 2, 2019, I conducted a scheduled inspection of Marathon Pipeline, LLC. I arrived at the facility at 1:00 PM. I met with Jon Rupp, Environmental Coordinator, of Marathon Pipeline. Mr. Rupp gave me an update of the facility since my last inspection (2017). Marathon received a permit in 2017 which transitioned the facility from a ROP source to a minor source. Mr. Rupp brought up a question regarding a mobile generator which had been on site for over a year. We talked about whether it needed a permit but also applicability to NSPS IIII. Mr. Rupp would look into the size of the engine but we agreed that the generator should probably be treated as stationary since it hasn't left the facility. After our discussion, we went onsite to the facility.

We started near the manifold area. This is the area where connections are made from pipelines delivering LPG from the Refinery to the facility. The manifold area directs the incoming LPG to the loading racks. Next I observed the generator which was able to move but has been sitting onsite for over a year. The diesel capacity was 300 gallons and it was rated at 270 kw. Mr. Rupp said he would see if could get the spec sheet. Mr. Rupp pointed out the well head above Cavern 1. There are 8 Caverns onsite. Mr. Rupp pointed out the saturation pit and propane dryer. The dryer is used to dry propane before the raw propane gets to the loading rack. Next, I observed five bullet tanks which store LPG and Transmix. I observed the loading racks. There was no loading at the time of the inspection. There is annual recertification for drivers. I did observe signage on how to operate the loading rack. After observing the loading rack, I observed two brine tanks and a fire water tank. We then went into the pump house and I observed two fire engines. Next, I observed the flare. The flame was lit and appeared to be combusting efficiently. Frequent maintenance is performed and major maintenance is done approximately every five years. After observing the flare, I observed the brine ponds. After observing the ponds, we went back to the conference room in the office building. We discussed the records and Mr. Rupp gave me the maintenance records for the generators. I concluded my inspection at 2:50 PM.

COMPLAINT/COMPLIANCE HISTORY:

There has not been any citizen complaints registered nor violations issued against Marathon Pipe Line, LLC.

OUTSTANDING CONSENT ORDERS:

None

OUTSTANDING LOVs

None

OPERATING SCHEDULE/PRODUCTION RATE:

This facility operates 24 hours a day, 365 days a year.

PROCESS DESCRIPTION

The Marathon Pipe Line, LLC, LPG Transfer and Storage facility is located at 24400 Allen Road in Woodhaven, Michigan between West Road and Van Horn Road. The area is primarily industrial-commercial and the nearest residence is approximately 300 yards south of the facility's property line.

Liquefied petroleum gas (LPG) is received primarily by pipeline and stored in one of eight dedicated underground storage caverns (solution mined salt domes). Stored LPG can be transferred offsite via pipeline or tanker trucks. There are two loading lanes for transfer of the LPG, (primarily propane) to tanker trucks, one station for transmix loading into trucks, one LPG unloading station, two brine storage tanks and two brine ponds and five horizontal LPG above ground storage tanks for temporary storage of transmix due to multiple products being transferred through the pipeline.

Ancillary equipment includes an ethyl mercaptan injection system for "stenching" or odorizing propane

loaded on trucks and a dryer to remove moisture from the propane prior to loading.

During periods of LPG transfer to pipelines or tanker trucks, LPG is displaced from the underground caverns by pumping brine stored in on-site ponds into the caverns. During periods of LPG receipt via pipeline, LPG is discharged into the underground caverns and brine is displaced and temporarily stored in two vertical open-top storage tanks (Tanks 34-T4 and 34-T6) prior to the brine being return to the brine ponds. The brine tanks are used to capture and control hydrocarbons entrained in the brine or in the case of an unanticipated mechanical failure in the wellhead or piping system.

In addition, various relief valves within the facility are routed to the an above ground flare to safely control overpressure situations. Secondary controll includes brine tanks that are equipped with glow coil igniters that float on the brine and serve as a continuous source of ignition should LPG be released in the tanks.

APPLICABLE RULES/PERMIT CONDITIONS:

Marathon Pipe Line, LLC, operates under Permit to Install(PTI) 62-17. It was issued in 2017 to convert the facility from a Title V to a minor source.

Compliance with PTI 62-17 was evaluated:

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

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EULODING	Two Truck Loading Racks, each with two loading positions and one unloading position, for propane, butane and liquefied petroleum gas. Emissions controlled by flare.	2/9/68	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: EULODING

DESCRIPTION: Truck loading operation for transferring LPG from the underground caverns into tanker trucks

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: flare

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Compliance Determination
1. VOC	0.7 lb	per 1,000 gallons loaded	In calendar year 2019, the facility loaded over 26 million gallons of material. Based on engineering design, 1.04 pounds is vacated to flare. Based on engineering calculations, .08 lbs of VOC per 1000 gallons loaded was emitted..

II. MATERIAL LIMITS

N/A

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EULODING unless all applicable provisions of Rule 706 are met. (R 336.1706)
Compliance- The Air Quality Division has a current variance for complying with this specific rule based on the pressurized loading that occurs at the facility.

2. The permittee shall install, maintain and operate in a satisfactory manner, a vapor tight collection line which delivers the organic vapor from truck loading hose disconnects to a control device when loading any delivery vessel with an organic compound having a true vapor pressure greater than 1.5 psia. (R 336.1702(a), R 336.1706)
Compliance- The Air Quality Division has a current variance for complying with this specific rule based on the pressurized loading that occurs at the facility.

3. The permittee shall not release any propane, butane, or LPG from EULODING unless it is routed to the flare. The flare shall be installed, maintained, and operated in a satisfactory manner. (R 336.1702(a), R 336.1910, R 336.1911)
Compliance- Any emissions from loading are routed to the flare.

IV. DESIGN/EQUIPMENT PARAMETERS

The permittee shall not operate EULODING unless the flare is installed, maintained, and operated according to manufacturer's recommendations. Satisfactory operation includes a continuously burning pilot flame and operating it according to manufacturer's recommendations. (R 336.1702(a), R 336.1706 R 336.1910)

Compliance- Flare appeared to be installed and operating correctly. The pilot flame was burning. The permittee shall develop written procedures for the operation of control measures. These procedures shall be posted in an accessible, conspicuous location near the loading device. (R 336.1706 (4))

Compliance- Certification is required of drivers every year by Marathon. I observed loading instructions posted by the loading rack.

V. TESTING/SAMPLING

N/A

VI. MONITORING/RECORDKEEPING

1. The permittee shall keep, in a satisfactory manner, monthly records of the volume of LPG loaded into tanker trucks and the number of tanker trucks loaded. The permittee shall keep these records on file at a location approved by the AQD District Supervisor and make them available to the Department upon request.

(R 336.1706(2))

Compliance- Records were kept and received during inspection.

2. The permittee shall keep, in a satisfactory manner, monthly records of the pounds of VOC emitted per 1,000 gallons loaded, as required by SC I.1. The permittee shall keep these records on file at a location approved by the AQD District Supervisor and make them available to the Department upon request. (R 336.1706(2))

Compliance- Emission calculations are kept and were received during the inspection. Review of the records indicate that the facility is meeting its emission limit.

VII. REPORTING

N/A

VIII. STACK/VENT RESTRICTIONS

N/A

IX. OTHER REQUIREMENTS

N/A

APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS:

N/A

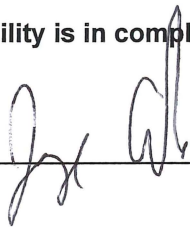
MAERS REPORT REVIEW:

NA

FINAL COMPLIANCE DETERMINATION:

The facility is in compliance with applicable regulations at the time of the inspection.

NAME



DATE

1-24-20

SUPERVISOR

