

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: On-site Inspection

B907363436

FACILITY: MPLX Terminals LLC - Niles Terminal		SRN / ID: B9073
LOCATION: 2216 S. Third St., NILES		DISTRICT: Kalamazoo
CITY: NILES		COUNTY: BERRIEN
CONTACT: Josh Cones, Terminal Manager		ACTIVITY DATE: 06/29/2022
STAFF: Matthew Deskins	COMPLIANCE STATUS: Compliance	
SUBJECT: Unannounced Scheduled Inspection		SOURCE CLASS: MAJOR
RESOLVED COMPLAINTS:		

On June 29, 2022 AQD staff (Matt Deskins) went to conduct an unannounced scheduled inspection of the MPLX (Marathon Petroleum) facility located in Niles, Berrien County. The facility consists of two adjacent petroleum product terminals (North and South) located at 2216 and 2140 South Third Street which MPLX both owns and operates. The facility receives petroleum products in large batches via the Wolverine Pipeline that get stored in numerous above ground storage tanks. Products received via pipeline include gasoline, diesel fuel, and kerosene. Products received via tanker truck include ethanol, red dye, wholesale gas additive, lubricity, and conductivity. Conductivity actually comes in 55-gallon drums and is used in the diesel fuel lines to dissipate static electricity (caused by viscosity) as it flows through the piping. Also, back in 2018 they installed a skid for a butane loading operation that is brought in by pressurized delivery trucks similar to propane. The butane is injected into recirculation loops of up to 4 tanks located at the North Terminal. The purpose of the butane is to raise the Reid Vapor Pressure in the tanks, as necessary, to meet seasonal specifications. They installed the skid under the AQD Permit Exemptions of Rule 285 and Rule 291 (If needed, please see correspondence file for exemption use justification and emission calculations in a letter Dated May 16, 2018). Ultimately the gasoline, diesel, kerosene, and ethanol products are loaded into mobile tanker trucks for delivery to service stations and/or bulk plants. In addition, small quantities of various additives (red dye, wholesale gas additive, lubricity, and conductivity) may be injected into the products as they are loaded into the mobile tanker trucks. These products can also be shipped via pipeline from the north terminal into the Wolverine Pipeline. The facility is a major source for criteria pollutants but is considered an Opt-Out for Hazardous Air Pollutants (HAPs) and the purpose of the inspection was to determine compliance with their ROP No. MI-ROP-B9073-2019. The facility is also subject to 40 CFR Part 63 Subpart BBBBBB (Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities), but this inspection will not be determining compliance with this regulation since the AQD isn't delegated by the EPA to enforce it at Area Sources. Staff departed for the facility at approximately 9:20 a.m.

Staff arrived at the facility at approximately 10:45 a.m. The entrance gate to the office area is locked and you have to announce yourself and be buzzed in. Staff followed the posted procedures and was allowed in. Once in the office area staff was greeted by Tricia Kniffin-Presswood who is a Terminal Operator. Staff had met Tricia during previous inspections and staff mentioned to her that MPLX was on their list of inspections this year. Staff then asked if Brendan Anderson was available. Brendan was the last Terminal Manager that staff was aware of. Tricia mentioned that Brendan was now permanently at their Detroit facility and that Josh Cones was the new Terminal Manager. She then asked staff to sign in and she would let Josh know

staff was there. Once signed in, Josh came into the Control Room to greet staff. Staff then gave him a business card and mentioned the purpose of the visit and what it would entail. Josh and Tricia then led staff to their conference room. Once in the conference room, staff again went over what the inspection would entail and asked if Toby Rickabaugh was still the environmental contact for the facility should staff need to follow up with anything. Josh mentioned that Brian Sweeley (Environmental Professional) is their environmental contact now and he is based out of Champaign, Illinois. Josh had contacted Brian to let him know staff was there and what for. Josh mentioned that he may have to contact him should they need his assistance with anything. Staff then asked Josh if he could e-mail him Brian's contact information which he did.

Staff then proceeded to go over items contained in the ROP with Josh and Tricia. The first thing staff asked was for them to verify that the emission unit summary table descriptions were correct and if the products stored in each tank was still the same. The following is a summary of the emission units at the facility. With regards to the tanks, staff also listed what is stored in each of them in BOLD under the emission unit ID. Josh and Tricia verified that all the tanks listed were correct as well as the products stored in them except for EUTK64-9. EUTK64-9 now stores Premium Gas (91 Octane) where previously it stored Blend Grade Gas (84 Octane). Staff then asked if they still track their daily inventory electronically like had been showed to staff previously. They said that they do and still run the terminal End of Day (EOD) and End of Month (EOM) Inventory Reports. The reports are pretty accurate with an accuracy of only +/- a few gallons.

#### EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation	
		Date/ Modification Date	Flexible Group ID
EURACK- SOUTH	Loading rack for South Terminal with carbon absorption system for primary control device and a portable combustor unit as the backup control device.	01-01-61/	FGLOADRACKS
		12-31-82/	FGMACT-BBBBBB
		10-24-00	
EURACK- NORTH	Loading rack for North Terminal with carbon absorption system for primary control device and a portable combustor unit as the backup control device.	01-01-71/	FGLOADRACKS
		12-31-82	FGMACT-BBBBBB
EUVCU-PORT		06-01-91/	FGLOADRACKS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation	
		Date/ Modification Date	Flexible Group ID
	Portable vapor combustor (either a RANE or John Zink) used as the backup control system for the loading racks.	06-01-00	FGMACT-BBBBBB
EUTK20-13  Mothballed	17,677 barrel (742,434 gal) capacity above ground cone roof storage tank for fuel oil at North Terminal.	01-01-71/NA	FGTANKFARM
EUTK25-3  Premium Gas (91 Octane)	19,965 barrel (838,539 gal) capacity above ground storage tank, changed from an external to internal floating roof (geodome) in 2000 at South Terminal.	01-01-71/ 10-03-00	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
EUTK31-11  Premium Gas (91 Octane)	28,716 barrel (1,206,072 gal) capacity above ground fixed roof storage tank with internal floating roof at North Terminal.	01-01-71/NA	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
EUTK35-4  ULSD #1	29,255 barrel (1,228,710 gal) capacity above ground cone roof storage tank for jet kerosene and fuel oil at South Terminal.	01-01-61/NA	FGTANKFARM
EUTK55-2  Blend Grade Gas (84 Octane)	46,370 barrel (1,947,540 gal) capacity above ground fixed roof storage tank with internal floating roof at South Terminal.	01-01-61/NA	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
EUTK55-5  Blend Grade Gas (84 Octane)	47,124 barrel (1,979,208 gal) capacity above ground storage tank, changed from an external to internal floating roof (geodome) in 2003 at South Terminal.	01-01-61/ 08-01-03	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
EUTK55-6	45,640 barrel (1,916,880 gal) capacity above ground fixed	01-01-71/	FGTANKFARM

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation	Flexible Group ID
		Date/ Modification Date	
Ethanol	roof storage tank with suspended internal floating roof at South Terminal.	11-11-13	FGFRTANKS FGMACT-BBBBBB
EUTK55-7	44,020 barrel (1,848,840 gal) capacity above ground fixed roof storage tank with internal floating roof at South Terminal.	01-01-66/NA	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
Blend Grade Gas (84 Octane)			
EUTK64-9	56,146 barrel (2,358,132 gal) capacity above ground fixed roof storage tank with internal floating roof at North Terminal.	01-01-71/NA	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
Premium Gas (91 Octane)			
EUTK67-12	59,270 barrel (2,489,340 gal) capacity above ground cone roof storage tank changed to an internal floating roof in 2016 at North Terminal.	01-01-71 2016	FGTANKFARM
Premium Gas (91 Octane)			
EUTK80-8	72,390 barrel (3,040,380 gal) capacity above ground cone roof storage tank at South Terminal.	01-01-77/NA	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
ULSD #2			
EUTK100-10	88,858 barrel (3,732,036 gal) capacity above ground fixed roof storage tank with internal floating roof at North Terminal.	01-01-71/NA	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
Blend Grade Gas (84 Octane)			
EUTKT-1	1,198 barrel (50,316 gal) capacity above ground fixed roof transmix tank with internal floating roof at South Terminal.	01-01-61/NA	FGTANKFARM FGFRTANKS
Transmix			

After going through the emission units with Josh and Tricia, staff started going through the various record requirements of the ROP. Staff ended up reviewing the

most recent 12-month rolling time period of records that covered June 1, 2021 through May 31, 2022.

Staff then asked Josh and Tricia some questions about the two terminals (North and South) and the current operations occurring at each one. The following is a summary of staff's discussions with them, what staff noted during the on-site inspection, and later what staff noted in a review of the records back at the office. According to Josh and Tricia, the North Terminal loading rack is still not being used at all and the storage tanks that are there are only being used for product storage for the South Terminal. They said that all the piping has been removed from the load rack and has been purged with nitrogen. They said that there are still 5 tanks at the North Terminal and as mentioned earlier under the emission unit descriptions, one stores Blend Grade Gasoline (84 Octane), three store Premium Grade Gasoline (91 Octane), and one is still mothballed / decommissioned (20-13). They went on to say that the one additive tank there, which was lubricity, and all the red dye tanks are decommissioned as well with all piping to them removed (this was the same as what staff was told during the previous inspection except that they hadn't decommissioned the lubricity tank yet). Staff then asked about the Vapor Recovery Unit (VRU) at the North Terminal. As mentioned in previous inspection reports, historically both the North and South Terminals used a carbon adsorption system as VRUs. Josh said that the VRU at the North Terminal is still shut down since no loading is occurring at that terminal. Staff had been told during the previous inspection that the carbon had been removed from the unit and all pipes were purged with nitrogen and blind flanged off. Josh verified that was still the case. He and Tricia also mentioned that all the equipment at the loading rack had been removed and it has no load out arms or anything associated with product loading anymore.

Staff then asked about the South Terminal and if operations were the same as they were during the previous inspection which Josh verified. Josh mentioned that the loading rack still has three lanes. He said that the two outside lanes (1 and 3) are still used for dispensing all of their petroleum products and lane 2, which is in the middle, is strictly used for the off-loading of ethanol from tanker trucks. As mentioned in previous inspection reports, the VRU here is larger than the one that had been at the north terminal and it was manufactured by Jordan Technologies in 2000. During previous inspections staff was told that this one was sized large enough to handle both terminals if needed. Staff then asked about the portable flares (VCU's) and Josh and Tricia said that they have access to them when needed but they are still not kept on site. He confirmed that it is brought in if they are doing maintenance on the VRU or should something unexpected happen. Staff had been told in the past that both terminals are wired so that all they have to do is bring the flare in and hook it up when needed. The unit is ignited by propane. They still track when it is used on a computer program for how long it has run and how much throughput it has handled.

Staff then went on a site tour with Josh and had to don fire-retardant coveralls. Staff first went to check out the South Loading Rack where they observed two trucks being loaded. Staff did not note any leaks and that they were using the vapor recovery line that goes over to the VRU. Staff also observed that the other lanes had no signs of leaking couplers, hoses, etc. either. There was some staining on the floor but it looked pretty typical for what staff had observed in the past at this facility as well as at other terminals. As mentioned in the previous inspection report, the facility no longer has instructions posted by the terminal because it is now done by

computer. The truck driver scans a card and the computer instructs them on what needs to be done. There is also an instructional booklet next to it if needed. Staff also checked out the VRU where everything on the unit still looked the same as it had in the past. Since trucks were loading out, staff noted that the VRU was operating and the carbon bed was being regenerated at 27.3 inches of Hg (Mercury). The ROP requires that it be regenerated above 26. All data from the VRU is displayed and recorded with a Yokogawa electronic recorder. According to Josh, the VRU will still shut down if the required vacuum is not met and an alarm will be given. Staff had been told previously that they actually have three or four safeguards built into the system that are constantly monitored and will shut down the VRU automatically if it's not operating properly. The VRU also has a CEMS that was installed a number of years ago that monitors total hydrocarbon output of the stack and will cause the VRU to start up if emissions reach a certain level. This is in addition to it regenerating every 15 minutes during truck loading as required. They had installed the CEMS to save on the frequency of carbon change outs and it also helps save power/electrical costs.

Next to the South Terminal loading rack there is still a Wastewater Tank (WA-10). Any water that goes through the load out area is collected and goes through an oil/water separator. The oil then goes into a Transmix Tank (T-1) and the water goes to WA-10. Josh and Tricia had earlier verified that wastewater is still pumped out by In-Serv and it is trucked to Beaver Oil in Illinois as needed.

**Note:** Staff did not check out the roofs of any tanks because they had done that during previous inspections.

Staff then headed over to the North terminal where they verified that both the VRU, various additive tanks, and the loading rack were not in use and had been decommissioned. Staff also checked out the butane skid that is located here.

Staff then headed back to the office and once there, he gave them back their fire-retardant coveralls, and then thanked Josh and Tricia for their time. Staff mentioned to them that things appeared to be in order but would get back with them or Brian if there was an issue or something was overlooked. Staff departed the facility at approximately 1:10 p.m.

The following is a summary of the ROPs conditions and staff's inspection findings.

**SOURCE WIDE CONDITIONS:** The facility has opt-out HAP limits of 24.9 tons for total HAPs and 9.9 tons for any single HAP in a 12-month rolling time period. Staff reviewed the records for the most recent 12-month rolling time period ending in May of 2022. It was noted that total HAPs emitted was approximately 2.44 tons and the highest individual HAP emitted was approximately 0.75 tons (typically hexane) which are both well below the allowable limits. The facility is submitting the required ROP reports as required.

**EUTK80-8:** This tank is subject to the New Source Performance Standard (NSPS) Subpart K because of its size and the date of which it was installed. However, Subpart K conditions do not apply when the material stored has a vapor pressure less than 1.5 psia. According to their tank storage records, MPLX has only stored Ultra Low Sulfur #2 Distillate in it since it had been installed. Staff noted from previous inspections that the vapor pressure of this product was 0.19 psia which is

well below the NSPS requirement. The facility is submitting the required ROP reports as required.

**FG-LOADRACKS:** This emission unit includes both load racks located at the north and south terminals. As mentioned earlier, the north terminal loading rack is decommissioned as well as the VRU located there. The south loading rack has its emissions controlled by a carbon adsorption system and it is the primary control unit. It appears that the facility is meeting all the requirements for that type of emission control. The portable VCU's (flares) don't get used much and are not on site, but staff has been told that they are propane fired, are equipped with a thermocouple flame sensor, are being maintained properly, etc. They also track when it is used.

As for the carbon adsorption system, it is required to regenerate at a minimum vacuum of 26 inches of mercury once every 15 minutes during gas loading which it appears to do. The facility is keeping track of maintenance, malfunctions, etc. on the equipment through their Vapor Control System Downtime Report which is also required by 40 CFR Part 63 Subpart BBBBBB. Staff will assume that by doing this the VRU is being operated and maintained according to the manufacturer. The facility also installed a CEMS on the stack of the VRU that monitors total hydrocarbons coming out of it and will automatically kick on the VRU if they reach a certain level. The facility has been doing RATA testing on the CEMS unit. Staff observed two trucks loading and no leaks of hoses or couplers were observed. The trucks cannot load any products unless the vapor collection line to the VRU is connected.

**NOTE REGARDING MONITORING/TESTING OF THE LOADRACKS:** The facility was required to test the South Rack once within the effective dates of the current ROP and that was done on May 6, 2021 (The ROP effective dates are from 10/22/19 to 10/22/24). The results indicated VOC emissions at 0.59 mg/l and the permit limit is 35 mg/l. Historically the AQD's intent was to test one of the load racks, North and/or South, once during every ROP cycle. During the previous ROP cycle (ROP No: MI-ROP-B9073-2014), it was going to be the North Rack that was tested, but since that Rack was only used to load diesel at that time, we had changed the wording in that ROP that they must test it within 6 months if they change it back to gasoline loading.

As was mentioned earlier and as has been the case for a while now, the North Rack isn't being used at all for any product loading so future ROP's will probably require that the South Rack be tested again within the effective dates of the ROP. That is subject to change if for some reason they bring the North Load Rack back on-line. Also, even though the South Rack is equipped with a CEMS and they do a RATA on it annually as mentioned previously, there have never been any condition(s) included in the ROP requiring the RATA which is why the testing of it was included. Lastly, the new ROP template has a condition that control devices be tested every five years which also has been an EPA requirement for Title V / ROP Subject Sources.

**NOTE:** To date, all stack testing of control equipment and/or the CEMS RATAs have indicated compliance with all applicable emission limit requirements or equipment parameters.

As for product loading and unloading, it also appears that the facility is meeting the requirements of the permit. It appears that the loadouts are equipped with interlocking systems and vapor tight collection lines. They do daily sight, sound, and smell leak checks during daily walk arounds and they also have a meter for

checking for leaks. The ROP requires that they do quarterly checks with the meter but the facility has been doing them more frequently do to the NESHAP BBBB that applies to them. Staff earlier had asked Tricia about the annual tanker certification program and if MPLX still has the program on their website called Hauler Portal. She said that they do and said that it is still an on-line program where carriers can enter their tank tightness testing and driver information. As mentioned in previous inspection reports, this allows the various carriers to submit their certification once instead of having to have their tanker haulers fill one out for every one of MPLX's terminals. After a driver enters one of MPLX's facilities, the drivers must enter their tanker number at the loadout system prior to loading. If any tanker number is not shown in the computer as being certified, the loadout system will lock them out and not allow them to load. Tricia said that all certifications are reviewed and approved by MPLX personnel also. As had been mentioned previously, it appears that the south terminal loading rack is being properly maintained and staff did not notice a lot of signs of leaks or stains out of the ordinary. The facility appears to be doing all the Monitoring/Recordkeeping requirements if applicable. The stack dimensions appear to be accurate for the control equipment on-site. Staff could not verify the dimensions of the VCU's since they are not stored there. The facility also appears to be meeting all the conditions under Other Requirements as applicable and they have a CAM Plan for all their pollution control equipment. The facility is submitting the required ROP and any Test reports as required.

**FGTANKFARM:** This emission unit includes all tanks at the facility that have applicable requirements (Every tank at the facility is included in this FG). The facility is maintaining monthly and 12 month rolling VOC emission rates for the tanks. They are also monitoring and recording monthly and 12-month rolling gasoline throughputs for both the north and south terminals. The permit limits the facility to VOC emissions of 53.11 tons and 580 million gallons of gasoline throughput. According to records, the 12-month rolling total ending in May of 2022 indicated VOC emissions from all tanks at approximately 29.30 tons. The gasoline throughput, for tanks storing gasoline, for that same timeframe was approximately 303,922,585 million gallons. The facility is submitting the required ROP reports as required.

**FGFRTANKS:** These are all the fixed roof tanks that are subject to Rule 604 and/or Rule 702. Any tank that stores anything other than distillate are equipped with internal floating roofs equipped with seals and the facility inspects the tanks as required. They still have the program on a facility computer that indicates what each tank is storing along with other information. It appears that they are complying with the requirements of both Rule 6 and Rule 7. The facility is submitting the required ROP reports as required.

**FGMACT-BBBBBB:** As mentioned in the opening paragraph, the AQD is not delegated to enforce the federal NESHAP for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities as specified in 40 CFR Part 63 Subparts A and BBBB. Compliance requirements with this regulation are cited under the Flexible Group FGMACT-BBBBBB as well as mentioned in the "Other Requirements" section of that Flexible Group in the ROP. The facility has submitted the initial notification and the notification of compliance status on time as required (May 9, 2008 for the initial notification and January 10, 2011 for the notification of compliance status). In their notification of compliance status report (MACT Reporting File – Orange) it lists all the methods in which they will comply with the NESHAP. They have been

submitting these reports on a semi-annual basis, but staff does not review them to make any type of compliance determination.

**CONCLUSION:** The facility appears to be in COMPLIANCE with ROP number MI-ROP -B9073-2019 at the present time. Staff did not make a compliance determination with regards to the MACT BBBB since we aren't delegated to enforce it at Area Souces.

NAME Matt Dosh

DATE 6-30-22

SUPERVISOR RIL 7/13/22