

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

B907352732

FACILITY: MPLX Terminals LLC - Niles Terminal		SRN / ID: B9073
LOCATION: 2216 S. Third St., NILES		DISTRICT: Kalamazoo
CITY: NILES		COUNTY: BERRIEN
CONTACT: Troy Vance , Terminal Operator		ACTIVITY DATE: 03/05/2020
STAFF: Matthew Deskins	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Unannounced Scheduled Inspection		
RESOLVED COMPLAINTS:		

On March 5, 2020 AQD staff (Matt Deskins) went to conduct an unannounced scheduled inspection of the 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 Marathon Petroleum 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. Ultimately the gasoline, diesel, kerosene, and ethanol 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 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. Staff departed for the facility at approximately 10:35 a.m.

Staff arrived at the facility at approximately 12:30 p.m. after travel and having lunch. Staff pulled into the visitor parking area but there was no room to park do to a tree crew taking them up. Staff parked behind one of their trucks and walked up to the gate. The gate is locked and you have to announce yourself and be buzzed in. After about three attempts, staff was able to contact someone and introduced them self. The employee then told staff they could park inside the fence and then opened the gate for them. Once parked staff proceeded into the office area where they were greeted by Troy Vance (Terminal Operator). Staff introduced them self to Troy, gave him a business card, and stated the purpose of the visit. Staff then asked if Brendan Anderson was available. Brendan was whom staff met with during the previous inspection. Troy said that he wasn't and that he was on a temporary assignment down in Findlay, Ohio and that he was filling in for Brendan. Troy then stated that he could probably assist staff and staff said that would be fine. Staff then mentioned that Tricia Kniffin-Presswood (Terminal Operator) had also assisted staff in the past with the inspection and asked if she was available. He said that she was and he then led staff to the control room. He then had staff sign in and went over safety protocols. As Troy was finishing up with this, Tricia came in and staff greeted her as well. Staff then went over what the inspection would entail and asked if Victor Brzeg was still the environmental contact for the facility should staff need to follow up with anything. Troy mentioned that Victor is still with the company but is no longer their environmental person. He said that currently Toby Rickabaugh out of Indianapolis and Julie Grit out of Findlay are handling their environmental records. Staff then asked for their contact information which Troy provided.

Staff then proceeded to go over items contained in the ROP with Troy 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. Troy and Tricia verified that all the tanks listed were correct as well as the products stored in them. Staff then asked if they still track their daily inventory electronically like had been showed to staff previously. They said that they do and showed staff the various terminal End of Day (EOD) and End of Month (EOM) Inventory Reports. The reports appear really 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/ 12-31-82/ 10-24-00	FGLOADRACKS FGMACT-BBBBBB
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/ 12-31-82	FGLOADRACKS FGMACT-BBBBBB
EUVCU-PORT	Portable vapor combustor (either a RANE or John Zink) used as the backup control system for the loading racks.	06-01-91/ 06-01-00	FGLOADRACKS 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	01-01-61/ 08-01-03	FGTANKFARM FGFRTANKS FGMACT-BBBBBB

	South Terminal.		
EUTK55-6 Ethanol	45,640 barrel (1,916,880 gal) capacity above ground fixed roof storage tank with suspended internal floating roof at South Terminal.	01-01-71/ 11-11-13	FGTANKFARM FGFRTANKS FGMACT-BBBBBB
EUTK55-7 Blend Grade Gas (84 Octane)	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
EUTK64-9 Blend Grade Gas (84 Octane)	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
EUTK67-12 Premium Gas (91 Octane)	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
EUTK80-8 ULSD #2	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
EUTK100-10 Blend Grade Gas (84 Octane)	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
EUTKT-1 Transmix	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

After going through the emission units with Troy and Tricia, staff started going through the various record requirements of the ROP. Tricia ended up printing out staff the most recent 12-month rolling time period of records that covered February 1, 2019 through January 31, 2020. Staff looked things over to make sure it was what they needed and then told Troy he would review them more thoroughly back at the office.

Staff then asked Troy 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 Troy 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 now 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, two store Blend Grade Gasoline (84 Octane), two store Premium Grade Gasoline (91 Octane), and one is still mothballed (20-13). They went on to say that the one additive tank there, which was lubricity, and all the red dye tanks are now decommissioned 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. Troy 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. Troy verified that was still the case. He 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 Troy verified. Troy 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 Troy said that they have access to them when needed but they are not kept on site. He confirmed that it is brought in if they are doing maintenance on the VRU or if something catastrophic should 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 have a computer program that they can switch over to when running the flare that will track how long it has run and how much throughput it has handled.

Staff then went on a site tour with Troy and had to don fire retardant coveralls. Staff first went to check out the South Loading Rack where they observed one truck 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 that were not currently in use had no signs of leaking couplers, hoses, etc. There was some staining on the floor but it looked pretty typical for what staff had observed in the past here and at other terminals. The facility no longer had 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. Troy mentioned that this new system had just been added. Staff then went over to the VRU where everything on the unit still looked the same as it had in the past. Staff then viewed some previous load out records for the VRU that were displayed on the Yokogawa electronic recorder. It appears that it still is regenerating at 28 to 30 inches of Hg (Mercury) and the requirement is that it has to be done above 26. According to Troy, 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. The had installed the CEMS to save on the frequency of carbon change outs.

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. Troy verified that wastewater is still pumped out by In-Serv and it is trucked to Beaver Oil in Indiana 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 and the loading rack were not in use and had been decommissioned.

Staff then headed back to the office and once there, he thanked both Troy and Tricia for their time. Staff mentioned to them that things appeared to be in order but would get back with them if there was an issue or something was overlooked. Staff departed the facility at approximately 2:25 p.m.

Staff later reviewed the records back at the district office. 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 January 2020. It was noted that total HAPs emitted was

approximately 2.7 tons and the highest individual HAP emitted was approximately 0.7 tons (typically hexane) which are both well below the allowable limits. (See Attached Spreadsheets). 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.

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. As mentioned previously, staff had reviewed some readings during previous loadouts and it indicated the vacuum readings between 28 and 30 inches during the regeneration cycle. 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 one truck 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 will have to test the South Rack once within the effective dates of the current ROP which hasn't been done to date (The ROP effective dates are from 10/22/19 to 10/22/24). 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, we had changed the wording in that ROP that they must test it within 6 months if they change it back to gasoline loading. The facility still isn't loading gasoline out of that North Rack so the testing condition of the ROP remains the same. 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 will be required. Also, the new ROP template has a condition that control devices be tested every five years.

**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 still do a lot of sight, sound, and smell leak checks and they 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 BBBBBB that applies to them. Staff earlier had asked Troy about the annual tanker certification program and if MPLX still has the program on their website called Hauler Portal. Troy said that they do and said that it is an on-line program where carriers can enter their tank tightness testing and driver information. As mentioned in the previous inspection report, 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. 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 January 2020 indicated VOC emissions from all tanks at approximately 32.37 tons. The gasoline throughput, for tanks storing gasoline, for that same timeframe was approximately 302,580,585 million gallons. (See Attached Spreadsheets). 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 BBBBBB. 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. Staff did not make a compliance determination with regards to the MACT BBBBBB since we aren't delegated to enforce it.

NAME Matt Dark

DATE 3-9-20

SUPERVISOR RIL 3/10/20