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

B907332434

FACILITY: Marathon Petroleum Company LP - NILES		SRN / ID: B9073
LOCATION: 2216 S. Third St., NILES		DISTRICT: Kalamazoo
CITY: NILES		COUNTY: BERRIEN
CONTACT: Kevin Urdzik , Terminal Manager		ACTIVITY DATE: 12/04/2015
STAFF: Matthew Deskins	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Unannounced scheduled inspection.		
RESOLVED COMPLAINTS:		

On December 4, 2015 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-B9073-2014. 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 10:30 a.m.

Staff arrived at the facility at approximately 12:30 p.m. after travel and having lunch. While getting out of the vehicle staff ran into an employee who let staff in the office gate. Staff introduced them self and asked if Joe Williams (Terminal Manger) was available. The employee said that Joe had retired the previous year and he led staff into the office area and into a conference room. There he introduced staff to Kevin Urdzik who is the new Terminal Manager. Staff then introduced them self to Kevin and stated the purpose of the visit. Kevin then asked staff what the inspection entailed. Staff then explained to Kevin about the records required to be kept by the ROP and the equipment outside that staff would want to look at. Prior to discussing things any further staff exchanged business cards with Kevin and staff also gave him a copy of the DEQ "Environmental Inspection" brochure. Staff then asked Kevin if Kim Crame (Environmental Professional) still handled the various environmental records for them? Kevin said that Kim took a different job within Marathon and that now Jackie Gast out of their Detroit facility handles their environmental requirements. Kevin then phoned Jackie to let her know staff was there for an inspection. Kevin put Jackie on speaker phone and staff explained what records they needed to see in regards to emissions tracking and staff asked if she could e-mail them to him. She said she would. Staff then proceeded to go over the ROP requirements with Kevin and staff first asked him first to verify that the emission unit summary table descriptions were correct and what products were stored in each tank. About this time, Tricia Kniffin-Presswood stopped in. Tricia is an operator at the facility and she ended up sitting in on the inspection in case there were any questions she could assist with. The following is a summary of the emission units at the facility. Kevin verified that everything listed was correct and in regards to the tanks, staff will also list what is stored in each of them in BOLD under the emission unit ID according to Kevin. Kevin also showed staff how the facility tracks their daily inventory on his computer. The facility tracks all products that come in and out of the terminal on End of Day (EOD) and End of Month (EOM) Inventory Reports. The reports appear pretty accurate with a +/- 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 ULSD #2	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 #2	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 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 ULSD #2	59,270 barrel (2,489,340 gal) capacity above ground cone roof storage tank for fuel oil at North Terminal.	01-01-71/NA	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 Kevin went through the emission units, staff then started through the various record requirements of the ROP. The following is a summary of staff's discussions with Kevin and Tricia, what staff noted during the on-site inspection, and late what staff noted in a review of the records e-mailed to staff by Jackie.

Staff asked Kevin about the two terminals (North and South) and the current operations occurring at each one. According to Kevin, the North Terminal loading rack is not being used at all and the storage tanks that are there are only being used for product storage for the South Terminal. He said that there are 5 tanks at the North Terminal with two storing Blend Grade Gasoline (84 Octane), one storing Premium Grade Gasoline (91 Octane), and two storing Ultra Low Sulfur Diesel #2. He said that one of the diesel tanks is empty and one is "at bottom". He said they do have one additive tank there which is lubricity but they no longer have any red dye tanks. Staff then asked about the Vapor Recovery Unit (VRU) at the North Terminal. Historically both the North and South Terminals used a carbon adsorption system as VRUs. Kevin said that the VRU at the North Terminal has been shut down since no loading is occurring at that terminal. He said that the carbon has been removed from the unit and all pipes were purged with nitrogen and blind flanged off. NOTE: Staff did not inspect the VRU or loading rack at the north facility since they are both shut down.

Staff then asked about the South Terminal and Kevin mentioned that the loading rack located at it has three lanes. He said the outside lanes (1 and 3) are 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. The VRU here is larger than the one at the north terminal. During a previous inspection staff was told that this one was sized large enough to handle both terminals if needed. Staff then asked about the portable flare and Kevin said that it is not on site. He said it is brought in if they are doing maintenance on a VRU or if something catastrophic should happen. He said that they most recently had it brought in and was used for about 8 hours when they were changing out the heat exchanger on the South Terminal VRU. He said that both terminals are already wired in where all they have to do is bring the flare in and hook it up. He said that the unit is ignited by propane. They 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 when on a site tour with Kevin. As mentioned earlier, staff did not go over to check on things at the North Terminal since the loading rack and VRU were not in use. The South loading rack was very clean and had no signs of leaking couplers, hoses, etc. They also had instructions posted so drivers knew how to use the VRU and the dispensing hoses. The VRU will shut down if the required vacuum is not met and an alarm will be given. Staff noted that the south terminal VRU was regenerating and it was above 26 inches of Hg (Mercury). It was at 28 inches. The VRU displays and records operational information with a Yokogowa recorder. Staff also looked at several months of previous VRU regeneration data that had been recorded an e-mailed to staff by Jackie. It appears that the regeneration was always above 26 inches of Hg. Staff only printed a couple of pages since it was over 5,000 pages long (See Attached Spreadsheet). Staff did not print this information off Staff did not observe any tanker trucks being loaded since none came in while staff was on-site. Next to the South Terminal loading rack is a Waste Water Tank (WA-10). Any water that goes through the terminal 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. The waste water is ultimately pumped out by In-Serv and it is trucked to Beaver Oil in Indiana.

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

Staff then headed back to the office with Kevin where he thanked him and Tricia for their time. Staff departed the facility at approximately 2:15 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 12 month rolling time period ending in October 2015. It was noted that total HAPs emitted was approximately 2.0 tons and the highest individual HAP emitted was approximately 0.6 tons (typically hexane) which are both well below the allowable limits. (See Attached Spreadsheets)

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, Marathon still only stores Ultra Low Sulfur #2 Distillate in it since it was installed. Staff noted from previous inspections that the vapor pressure of this product was 0.19 psia which is well below the NSPS requirement.

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 shut down as well as the VRU located there. The south loading rack has its emissions controlled by a carbon adsorption system. It appears that the facility is meeting all the requirements for that type of emission control. The portable VPU (flare) still doesn't get used much and is not on site, but it is propane fired, is equipped with a thermocouple flame sensor, is 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. Staff observed the VRU at the south terminal and noted the vacuum reading was at 28 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.

As for product loading and unloading, it also appears that the facility is meeting the requirements of the permit. As mentioned earlier, staff noted instructions posted near both loadouts for both types of vapor control systems. It appears that the loadouts are equipped with interlocking systems and vapor tight collection lines. Kevin said that they do a lot of sight, sound, and smell leak checks but 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 new NESHAP BBBBBB that applies to them. Staff then asked Kevin and Tricia about the annual tanker certification program. Tricia said that Marathon has a program on their website called Hauler Portal. She said 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 their terminals. Each driver must enter their truck number and tanker number at the gate before it can open. If any tanker number is not shown in the computer as being certified, the gate will not open. As also mentioned previously, it appears that the south terminal loading rack is being properly maintained and did not notice any signs of leaks or stains.

FGTANKFARM: This emission unit includes all tanks at the facility that have applicable requirements. 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 latest 12 month rolling total ending in October 2015 indicated VOC emissions at approximately 25.5 tons and gasoline throughputs of approximately 359,438,398 million gallons (See Attached Spreadsheets).

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 as required. They still have the program on a facility computer that indicates what each tank is storing along with other information. He gave staff a copy of what the tanks are currently storing (See Attached). It appears that they are complying with the requirements of both Rule 6 and Rule 7.

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 with this regulation is cited in the Other Requirements section under the Source Wide Conditions of 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 semi-annually but staff does not review them to make any type of compliance determination.

The facility has also been submitting the semi-annual and annual ROP certifications for all of the above emission units and/or flexible groups as required.

CONCLUSION: The facility appears to be in COMPLIANCE with ROP number MI-ROP-B9073-2014. Staff did not make a compliance determination in regards to the MACT BBBBBB since we aren't delegated to enforce it.

NAME Matt Dash DATE 12-8-15 SUPERVISOR MB 12/8/2015