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

B664643841		
FACILITY: Sunoco Pipeline L.P Marysville Pump Station		SRN / ID: B6646
LOCATION: 250 Murphy Drive, MARYSVILLE		DISTRICT: Southeast Michigan
CITY: MARYSVILLE		COUNTY: SAINT CLAIR
CONTACT: J. David Misaros, Station Utility Operator		ACTIVITY DATE: 03/28/2018
STAFF: Sebastian Kallumkal	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Onsite Inspection and	complaint investigation	
RESOLVED COMPLAINTS: C-18-00450, C-18-00828, C-18-00829, C-18-00830, C-18-00831		

On Wednesday, March 28, 2018, I, Michigan Department of Environmental Quality-Air Quality Division Staff Sebastian Kallumkal conducted an unannounced, "scheduled" inspection at Sunoco Pipeline, L.P. located at 250 Murphy Drive, Marysville, Michigan. The purpose of the inspection was to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) Rules; and the conditions of Permit-To-Install (PTI) Number 178-98B for 7 crude oil storage tanks (FGTANKFARM). The purpose of the inspection was also to conduct odor observations to evaluate odor complaints (Complaint No.: C-18-00450, C-18-00828, C-18-00829, C-18-00830, and C-18-00831) allegedly related to facility's operations.

I arrived in the area at about 10:30 AM. From that time to about 10:40 AM, prior to arriving at Sunoco Pipeline, LP-Marysville, I conducted drive by odor observations, with the front windows of the vehicle down, starting from the intersection of I-94 & Gratiot Avenue along Gratiot Avenue, Allen Road, Cuttle Road, and Murphy Drive until where it ends at 300 Murphy Drive. I did not smell any crude oil smell along this route. I did not see any truck at the crude oil unloading area. The wind was 6.9 MPH, NE, Sky: Overcast (3-28-2018, 10:35 AM, www.wunderground.com)

I arrived at the facility at about 10:45 AM. At the facility I met Mr. J. David Misaros, Station Utility Operator (Work: 810-364-6251; Cell: 810-869-2196; Fax: 810-364-2947; E-mail: jdMisaros@SunocoLogistics.com). I introduced myself and stated the purpose of the inspection.

Sunoco Pipeline, L.P. is a crude oil storage and transport facility. The facility operates 24 hours a day, and 7 days a week. The facility receives crude oil from two Enbridge pipelines (Line 5 and Line 6) and from local oil wells by tanker trucks. The Enbridge pipelines originate in the province of Alberta in Canada. The crude oil from local wells is delivered via trucks to the crude oil unloading facility near the northeast corner of the property (4851 Gratiot Avenue, Marysville).

Initially, I informed him about recent odor complaints AQD had received. I inquired him if he recalls any incidents occurred those days that could contribute to the odor complaints. He referred the "Roof Landing Notification Log" and stated they had no incidents during those days. I received a copy of this log. (Attachment 1)

On January 21, 2018, Tank 34 was put back into service and the crude oil was filled slowly from another tank.

I also indicated to him that the crude oil unloading facility, Sun Refining & Marketing Co. has a permit to install (PTI No. 642-88) and that I would be conducting an inspection of that facility. I provided him a copy of the PTI. He informed me that he does not have any records regarding that facility and I needed to contact Mr. David Bonamy, Supervisor, regarding compliance verification. He stated that the unloading facility only receives sweet crude from local wells within Michigan. (See Sun Refining & Marketing Co. {SRN N1984} Inspection Report {N198443843} for details)

We also discussed the concerns (Attachment 2) raised by one of the complainants regarding the crude oil received and stored by this facility. He told me that the Sunoco facility receives sweet, synthetic (from Alberta oil sands), heavy and medium heavy crude oils via pipeline or truck (only sweet crude). The facility keeps Safety Data Sheets (SDS) for crude oils. (6 copies). The medium heavy crude was stopped few years but started receiving recently. He explained that the receipt of any type of crude depends on the refinery demands. The benzene and hydrogen sulfide contents are included in the SDS. received copies of SDS for each type of crude. Total Sulfur and Reid Vapor Pressure (RVP) are measured monthly for each product. Records are kept at the facility. (Attachment 4)

Next, we discussed the 20-year testing and inspection of Tank 41. On February 12, 2018, AQD received a copy of Notification to US EPA Region 5 that Tank 41 at this facility will be inspected on approximately April 1, 2018 and the repairs will be conducted through approximately July 15, 2018. On February 20, 2018, AQD received notification from Sunoco that Tank 41 will be emptied, degassed and cleaned and that during this process a thermal oxidizer (TO) will be used to reduce emissions. The TO will be used for approximately 5 days from March 15 through March 20. On March 15, 2018, Sunoco conformed AQD that Tank 41 will be degassed starting Friday, March 16 and the TO will be used until the LEL (Lower Explosive Level) is less than 10% and after that a carbon adsorption unit will be used. During the inspection, he told me that there are in the process of removing heel (bottom crude) from the tank through pipeline into another tank. On April 12, 2018, Lisa Fishbeck, Environmental Specialist, Sunoco Logistics, informed me that cleaning process (certified gas free) for Tank 41 has been completed as of April 5, 2018.

Mr. Misaros stated that at the time of my inspection, the pipeline was shut down and no crude oil was piped in, but it will start back up later on that day. He indicated that during each shift (12-hour shift) an operator makes three trips checking on the piping, pumps, valves, etc. to identify any leaks. The tank roofs are inspected every 10-year and 20-year cycle

He told me that they are currently not spraying the deodorizer during tanker truck (crude oil) unloading. Based on an email dated November 21, 2017 from Frank Cote, the facility has not used the deodorizer since December 2016.

Mr. Misaros assisted me during the inspection of the facility and stated that Lisa Fishbeck (O: 734 947-1784; 313 378 3686, LISA.FISHBECK@energytransfer.com) handles all the recordkeeping for the facility. He requested me to contact her for any questions related to emission calculations and recordkeeping.

He informed me that the Enbridge facility which is located south and adjacent to Sunoco Pipeline is a separate company and it delivers crude oil via two pipelines (Line 6 coming from Chicago and Line 5 coming from Wisconsin through Michigan Upper Peninsula.

He stated that he performs monthly and annual inspections of all tanks looking for any abnormalities. He thoroughly inspects the internal floating roofs for any leaks every month and additional leak inspections (VOC inspections) annually. He told me if there is leak in any of the tank connections, they identify it easily because everything is painted white. He informed me that the seals on all the tanks are inspected every 5 years and a complete inspection of the tanks and replacements are conducted every 20 years.

The facility has only one pipeline to deliver crude oil to refineries. No crude oil is sent out using trucks. The crude oil coming in and going out events are scheduled.

Next, we reviewed the permit requirements. He provided me the copies of the inspections and the tank throughput. He informed me that the emission calculations are kept by Lisa Fishbeck. He provided me the SDS for the crude oil received.

Next, he took for a site tour in his pickup truck. Initially, we visited the Tank 41, which has been degassed and emptied. The emissions from the degassing process, at that time, were controlled by two carbon adsorption units. We met Mr. Roy Kern, Engineering & Inspections. He explained that they are trying to empty out the tank of all crude oil before they can start the inspection. We walked around the tanks. I did not smell any crude oil smell there. "Midwest Cleaners" were involved in the emptying and cleaning of the tank.

We drove around the other tanks. I did not observe any discoloration on the white painted tanks. Also, I did not smell any crude oil during my inspection. I saw a tanker truck at the unloading area, but it left the area soon.

Next, we visited the tanker truck unloading area. Mr. Misaros had stated earlier that only sweet crude oil is unloaded from the trucks. The crude oil from trucks is pumped to Tank 43. The pump is located in a shed nearby. The unloading area has a plastic sump (about 24" diameter) with cover to collect crude oil

I saw the log in which the tanker truck driver records the number of barrels of crude oil unloaded each time. The pump has a meter which measures the crude oil unloaded. The cabin where the pump is located has "Marysville Unloading Procedure" posted both sides.

During the post inspection meeting, he provided me copies of the SDS for the crude oils received at the facility.

At about 1 PM I left the facility. I drove to the complainant's home on Murphy Drive. I did not smell any crude oil odor at the house. I knocked at the door. No one answered, so I left my business card with the date and time I visited the home. As I was leaving the home, someone who identified himself later as complainant's son inquired about the purpose of my visit. I identified myself and explained the purpose of my visit. When asked the complainant, he told me she was out and would be back later.

Next, I conducted further drive by odor observations with the front windows open along Murphy Drive. When turned to Gratiot Avenue, I observed a tanker truck at the unloading area. I stopped by and conducted odor observations. I did not smell any crude oil odor there. The truck appeared to be connected to the unloading station via hoses.

The sign on the gate stated: Great Lakes Transportation, Marysville Truck Station O: 800 335 5844 C: 989 621 3936

The sky was cloudy. Time-1:15 PM. The wind appeared to be calm.

I conducted further drive by odor observations with the front windows open, along Gratiot Avenue, Allen Road, Cuttle Road, and came back near complainant's home on Murphy Drive. I did not smell any crude oil odor during these observations.

I came back to the truck unloading area and the truck was still there. I did not smell any crude oil odor at that location. Time: 1:25 PM. I did not observe any visible emissions from the truck.

On April 3, 2018, Ms. Vanessa Davis, the complainant, contacted AQD in response to my odor investigations on March 28, 2018. Since she was not home, I had left a business card at her home. During the conversation, I informed her that I did not smell any objectionable odor on Gratiot Avenue, at her home, or on Murphy Drive during my investigation. We briefly discussed Tank 41 (this year) and Tank 34 (last year) inspection. I informed her that I would let her know when this reported is completed, so she can FOIA the report.

FACILITY OVERVIEW

Sunoco Pipeline, L.P.'s Marysville facility currently has five crude oil storage tanks (EUTANK 34, EUTANK41, EUTANK43, EUTANK44, EUTANK45, and EUTANK46) ranging from 4 million gallons to 11.5 million gallons in volume. EUTANK36 is also included in the permit, but this tank has been disassembled and is no longer at the facility (Letter to DEQ-AQD dated January 4, 2016<u>-Attached</u>)). Tank 41 is under inspection currently. From the storage facility, the oil is transported to the Marathon Refinery in southwest Detroit, British Petroleum's refinery in Toledo, Ohio, and the Toledo Refining Company through pipeline. No crude oil transported out via tanker trucks.

EUTANK44, EUTANK45, and EUTANK46 are subject to the requirements of New Source Performance Standard (NSPS) Subpart Kb for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. EUTANK44, EUTANK45, and EUTANK46 were constructed in 1987, 1994, and 2007, respectively. EUTANK34, EUTANK41, and EUTANK43 were constructed in 1960, 1961, and 1967, respectively, and are, therefore, not subject to NSPS Subparts K, Ka, or Kb for Petroleum Liquid Storage Vessels (NSPS Subpart K applies to tanks constructed between June 11, 1973 and May 19, 1978, and NSPS Subpart Ka applies to tanks constructed between May 18, 1978, and July 23, 1984). Other than the crude oil storage tanks, the facility has 5 electric pumps which are used to pump oil into and out of the storage tanks, a small propane heater in the maintenance garage, electric furnaces on the drop ceiling of the company's office, and a natural gas-fired 25 kW Generac emergency generator manufactured in 2010. The emergency generator is used to provide electricity for lighting and for the mechanical gate at the entrance to the facility in the event of a power outage. The Generac emergency generator is Subject to 40 CFR 63, Subpart ZZZZ for Reciprocating Internal Combustion Engines, but the AQD has not accepted delegation for this subpart at area sources of hazardous air pollutant emissions. The facility is keeping hours of operation of this generator.

COMPLIANCE DETERMINATION

FGTANKFARM (EUTANK34, EUTANK 41, EUTANK 43, EUTANK44, EUTANK45, EUTANK46)

SC 1.1 limits the crude oil throughput to 194,565,000 barrels per 12-month rolling period as determined at the end of each calendar month. The submitted records show that the total throughput is 2,165,951,886 gallons (51,570,283 barrels) for the January through December 2017 and 2,164,294,608 gallons (51,530,824 BBL) as of February 2018.

SC 1.2 and 1.4 require that the facility shall comply with all provisions of the Federal Standards of Performance for New Stationary Sources as specified in 40 CFR 60, Subpart A and Kb, as they apply to EUTANK44, EUTANK45, and EUTANK46 and equip and maintain the storage tanks with deck and seal configuration listed in the Table for SC 1.4. (see attached inspection records)

Mr. Misaros told me that the all storage tanks are equipped with internal floating roofs, welded deck, either mechanical shoe or vapor mounted primary seal and rim-mounted secondary seal as required by the PTI. Based on the process description submitted with the PTI application, the storage tanks appear to be in compliance with the floating roof requirements for 40 CFR 60, Subpart Kb as required in SC 1.2 and 1.4. (See attached inspection records)

SC 1.3 requires that EUTANK34, EUTANK36 (currently removed from site), EUTANK41, and EUTANK43 operated in compliance with R336.1604. Based on the information gathered during the inspection and the process description, these storage tanks appear to be equipped with internal floating roofs and proper seals. From the information available the tanks appear to be in compliance with Rule 604 requirements. (See attached inspection records)

SC 1.4 requires that the facility shall perform inspections and monitor operating information for EUTANK44, EUTANK45 and, EUTANK46 in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and Kb. The facility conducts the required inspections monthly on each of the six active storage tanks including EUTANK34, EUTANK41 and EUTANK43. PTI #178-98B only requires such inspections (visual inspections of the internal floating roof, the primary seal, or the secondary seal) be conducted on the three tanks subject to NSPS Subpart Kb (EUTANK44, EUTANK45, and EUTANK46) every 12 months after the initial fill. I collected copies of the records of the inspection records for AQD file. (See attached inspection records)

NSPS Subpart Kb (§60.113(b)(4)) also requires that the tanks be visually inspected for the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membrane and sleeve seals (if any) each time the storage vessel is emptied and degassed or every 10 years. But the facility conducts visual inspections of the affected tanks for the required NSPS Subpart Kb elements annually. If a problem is found to exist with the tanks during a visual inspection, the facility has 45 days from the date the problem was identified to correct the problem. Annual visual inspection reports for EUTANK44, EUTANK45, and EUTANK46 are attached for review.

SC 1.6 requires that all required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available to by the 15th day of the calendar month for the previous calendar month. The facility appears to be in compliance with this requirement.

SC 1.7 requires that the facility shall keep records of the throughput for each tank in FGTANKFARM for each calendar month and 12-moth rolling time period as determined at the end of each calendar month. The records show that the facility is keeping monthly and 12-month throughput records for each tank and total throughput. (see attached records)

SC 1.8 requires that facility keep records of inspections and operating information for EUTANK4, EUTANK45 and EUTANK46 in accordance with 40 CFR 60, Subparts A and Kb. The facility appears to be keeping the necessary records. Facility started keeping records of the VP of the liquid stored in each month or storage period with the throughput data.

FGFACILITY

SC 2.1a limits Volatile Organic Compound (VOC) emissions from FGFACILITY to less than 90 tons per year (TPY) based on a 12-month rolling time period. The submitted records (Emission Estimate Summary Table for Marysville) show that the 2017 Jan-Dec. VOC emissions were 26.02. Tons and the 2016 records show that VOC emissions for 2016 were 22.28 Tons. The facility is in compliance with the VOC emission limit.

SC 2.1b limits each (single) Hazardous Air Pollutant (HAP) emissions to less the 9 TPY based on a 12month rolling time period. The 2017 records show that the largest single HAP (n-Hexane) was 6.28 TPY.

SC 2.1c limits Total (aggregate) HAP emissions to less than 22.5 TPY based on a 12-month rolling time period. The 2017 records show that the total HAP emissions were 10.13 TPY. The facility calculated VOC and HAP emissions using TANKS 4.0.9d program.

SC 2.2 requires the facility to complete all required semi-annual calculations in a format acceptable to the AQD District Supervisor and made available by the last day of the calendar month following the end of the semi-annual time period. The facility appears to be in compliance with this requirement.

SC 2.3 requires that the facility shall keep, in a satisfactory manner, records of semi-annual VOC, individual HAP, and Total HAP emission rate calculations for FGFACILITY, as required by SC 2.1a, SC 2.1b and SC 2.1c. Also, that each semi-annual calculation (January 1-June 30 & July 1 – Dec. 31) shall include monthly calculations for each month in the semi-annual period. From the submitted records the facility appears to be in compliance with this requirement.

<u>Conclusion</u>: Based on this inspection and records review, Sunoco Pipeline, L.P.'s Marysville facility appears to be in compliance with the conditions of its PTI and other applicable air rules and regulations. The records cited are attached for review. During the odor observations for the complaint investigation I did not observe any objectionable odor with intensity, duration and frequency to cause a Rule 901 violation. Follow up odor observations would be conducted after future complaints or while in the area. These complaints are considered "RESOLVED" at this time.

NAME SchartingKallunkal DATE 5/61/2018 SUPERVISOR