

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

B664633237

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 , Plant Manager		ACTIVITY DATE: 02/04/2016
STAFF: Sebastian Kallumkal	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Onsite inspection for compliance evaluation and complaint investigation		
RESOLVED COMPLAINTS:		

On February 4, 2016, AQD staff, Sebastian Kallumkal conducted an unannounced, self-initiated 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-16-00329, C-16-00362, C-16-00457, C-16-00588, C-16-00589, C-16-00598, C-16-00647, C-16-00713, and C-16-00770) allegedly related to facility's operations.

I arrived in the area at about 10:55 AM. From that time to about 11:05 AM and at about 11:20 AM, prior to arriving at Sunoco Pipeline, LP-Marysville, AQD staff conducted drive by odor observations along SB Murphy Drive from the intersection of Gratiot and Murphy Drive to where Murphy Drive dead ends, with the front windows of the car down. I also conducted odor observations at 300 Murphy Drive (one of the complainants). This is a large private lot which starts where Murphy Drive ends. I did not smell any crude oil smell along this route. The wind was 6-8 MPH NW to WNW and sky was mostly cloudy (www.wunderground.com)

I arrived at the facility at about 11:25 AM. At the facility I met Mr. J. David Misaros, Plant Operator (Phone: 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. I also provided him the DEQ brochure for Environmental Inspections: Rights and Responsibilities. He indicated that 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 (Line 78 as referenced by Enbridge)) and from local oil wells by tanker trucks. The Enbridge pipelines originate in the province of Alberta in Canada. The oil from local wells is delivered to the facility by trucks to a crude oil unloading area near the northeast corner of the property (4851 Gratiot Avenue, Marysville).

Mr. Misaros assisted me during the inspection of the facility and provided me with the contact information for Ms. Lisa Fishbeck, Environmental Specialist (O: 734 947-1784; 313 378 3686, lfishbeck@sunocologistics.com), for any questions related to emission calculations and recordkeeping related to facility's operations.

During the pre-inspection meeting we discussed the facility's operations and the PTI requirements. The facility currently has six storage tanks including one tank (EUTANK41) out of service for repairs. Tank 36 (EUTANK36) has been decommissioned and removed from the site since January 13, 2016.

We also discussed the crude oil truck unloading station (Marysville Truck Unload) where crude brought in by tanker trucks is unloaded. This station is located at 4851 Gratiot Avenue, Marysville and is located adjacent to the Sunoco Pipeline Co. These two companies are sister companies under the parent company-Sunoco Logistics. This crude oil is stored exclusively in Tank 43 (EUTANK43). Mr. Misaros told me that his company has no control over this unloading facility and provided me the contact for Marysville Truck Unload (Mr. Tony Merritts, 580 548 3429).

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). I had observed couple of buildings at the Enbridge facility and some kind of construction going on there. He told me he doesn't have any information on the Enbridge facility and provided me contact person information (Donovan Grimes 989 297 0673).

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. They send crude oil samples every month to measure RVP (Reid Vapor Pressure). Tank 41 is under repair as result of leaks found during inspection. They found crude oil on the roof and that prompted another

inspection by an outside crew. The secondary seal and primary seal for this tank are being replaced. He informed me that the seals on all the tanks are inspected every 5 years and a complete inspection of the tanks is conducted every 20 years.

They receive three kinds of crude oil: Heavy; Sweet (all over Michigan and along injection points US pipeline) and Synthetic-from oil sands in Alberta.

Mr. Ned Rau also joined us during the meeting. 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 and offered to contact her after the site inspection/tour.

We also discussed the deodorizer spray that is used to mask the crude oil odor. He indicated that he would demonstrate this during the site tour.

Next he took for a site tour in his pickup truck. He informed me that in April 2014, they had a catastrophic roof collapse on Tank 43 (EUTANK43) and they don't know how it happened. They had the roof repaired since then. He then took me to near each tank. He told me that one of the employees conducts drive by visual tank inspections for any leaks six times a day (three during day and three during night). The crude oil can be easily identified because all tanks and connections are painted white. All tanks are attached with mixers to move the liquid around in the tanks. He also showed me three big charcoal filters which are connected in series to control the odor in the exhaust air from Tank 41 which is currently repaired.

Next he accompanied me to Tank 41. I observed Midwestern Services was working on the tank. The tank is empty and the left over crude oil is transferred to small horizontal tanks. I also observed the exhaust vent connected to the charcoal filters. Next we went to the area where samples are collected for RVP testing. He also picked up the deodorizer sprayer for demonstration.

Next we visited the tanker truck unloading area. One of the Great Lakes Tanker Truck was there. The crude oil from trucks is pumped to Tank 43. The pump is located in a shed nearby. Mr. Mizaros demonstrated the deodorizer spraying. The unloading area has plastic sump (about 24" diameter) with cover to collect crude oil from the bleed air while unloading. He sprayed the deodorizer around the sump opening (two rounds) and also inside the pump shed door. He told me that a vapor balance system is not necessary for tanker unloading because negative pressure is needed in the tanker for the crude oil to flow. The negative pressure is created by opening a vent in the truck. So during tanker unloading the air is going in to the tanker. I did not smell crude oil smell while standing there.

Then the tanker truck driver started unloading the truck. He connected the tanker to the delivery hose, opened the tanker valve and the valves on the sump pump and started the pump. Once the oil started flowing he opened the vent to let the air in. He then closed the sump valves. He opened the sump cover to look inside and then closed it. I smelled crude oil odor while he opened the sump cover. I did not experience any odor during tanker unloading. I verified (using thin paper tissue) that the truck vent is taking air in during unloading.

Then, Mr. Mizaros accompanied me to the area where they collect sample to test for RVP and where they store the samples.

During the post inspection meeting, he contacted Ms. Fishbeck. She directed me through the emissions records kept at the facility. I collected copies of the emissions for Jan-June 2015 and tank storage records. She offered to send the July-Dec. emission records by next week (of 2/7/2016).

After I left the facility at about 2 PM. Until 2:30 PM I conducted drive by odor observations with the front windows open along SB Murphy Drive, 300 Murphy Drive, NB Murphy Drive, NB Gratiot Avenue, Allen Road, Cuttle Road, SB Gratiot, NB & SB Pickford. I did not smell any objectionable odor along these routes. (wind=S-SW-SSW, 4.6-5.8 MPH-www.Wunderground.com)

I came back to the area at about 3:00 PM and conducted inspection at Enbridge facility located 256 Murphy Drive. (See MACES Inspection Report (U74160099733278). After the inspection I conducted odor observations from about 3:15 PM to 4:15 PM, and visited the residences of the following complainants. (wind = W-NW-WNW, 3.5 - 4.6 MPH; www.wunderground.com)

127 Murphy Drive – No odor at the residence. No one at home. Left business card with date/time of odor observations.

139 Murphy Drive- No odor at the residence. No one at home. Left business card with date/time of odor observations.

300 Murphy Drive- No odor at the residence. Talked to Ms. Pam Clearwood and her husband. Also provided them the business card with date/time of odor observations. She told me that she has not smelled the odor on that day or on the recent days. I advised them to contact AQD should they smell the odor again. I also received permission from her to go into their property to do odor observations even if they are not home.

126 Pickford, Kimball Township - No odor at the residence. No one at home. Left business card with date/time of odor observations.

133 Pickford, Kimball Township – Met Ms. Leah Eschenberg. No odor at the residence. Provided her the business card with date/time of odor observations. She informed me that she has not observed any objectionable odor for some time. She had smelled propane type odor during summer. She did not attribute that odor to Sunoco facility. She told me about the terrible odor during when one of the tanks at the Sunoco facility malfunctioned. She also told me that she would only complain when she smells odor at her residence and she won't drive to Murphy Drive to detect odor there. I agreed that she could call to complain about the odor when it causes an unreasonable interference with the comfortable enjoyment of life and property based on the Nuisance rule 901 (R336.1901b). She stated that Vanessa Davis, one of the complainants, burnt them all out with her constant complaining to the local fire department and other agencies and that she (Ms. Davis) can be on her own way regarding her complaints. I advised her to contact AQD should she smell the odor again.

111 Pickford, Kimball Twp.-Met Ms. Cathy Matts. No odor at her residence. She told me she had not smelled any objectionable odor some time now. . I advised her to contact AQD should she smell the odor again.

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 permitted, but this tank has been disassembled and is no longer at the facility. EUTANK43 has been operation since August 2015 after the repair. 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 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 in 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 MACT 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.

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 the each calendar month. The submitted records show that the total throughput is 2,418,424.680 gallons (57,581,540 barrels) for the January through December 2015.

SC 1.2 and 1.4 require 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.

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 stated in SC 1.2 and 1.4.

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. _

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) be done every 12 months after the initial fill. I collected copies of the records of the inspection records for AQD file. (See attached)

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. The facility has not calculated the throughput for each tank based on a 12-month rolling time period as determined at the end of each calendar month. The total throughput for 2014 (from 2014 MAERS Report) is 55,879,785.7 BBLs. Based on the 2014 and 2015 throughput has not exceeded the 12-month rolling period limit specified in SC 1.1. The facility will be advised to keep 12-month rolling time period records as required by this condition.

On February 16, 2016, AQD received emails from the company stating that they started keeping throughput based on a 12-month rolling time period. Please 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 records of the necessary records. Facility started keeping records of the VP of the liquid stored in each month or storage period with the throughput data. On February 16, 2016, Lisa Fishbeck explained that the facility receives the crude from same vendor, so the similar type of crude has the same vapor pressure. If two type of crude is stored in the same tank in the same month, it will keep separate information for the storage periods. See attached records.

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 show that the 2015 Jan-Dec. VOC emissions were 15.89 Tons and the 2014 MAERS report shows that VOC emissions for 2014 were 11.04 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 12-month rolling time period. The 2015 records show that the largest single HAP (m-Xylene) was 0.124 TPY.

SC 2.1c limits Total (aggregate) HAP emissions to less than 22.5 TPY based on a 12-month rolling time period. The 2015 records show that the total HAP emissions were 0.53 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.

Conclusion: 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 all other applicable air rules and regulations. The records cited are attached for review.

NAME Sebastiany Kallumkal

DATE 2/17/2016

SUPERVISOR 

