N6474
manila
Ingham

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

N647435516

FACILITY: ENBRIDGE PIPELINES (TOLEDO) INC.		SRN / ID: N6474
LOCATION: 2551-2557 GRIMES RD, DANSVILLE		DISTRICT: Lansing
CITY: DANSVILLE		COUNTY: INGHAM
CONTACT: Rhonda O'Leary, P.E. , Senior Air Quality Analyst		ACTIVITY DATE: 07/13/2016
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled inspection of facility which was last inspected in 2009.		
RESOLVED COMPLAINTS:		

On 7/13/2016, the Department of Environmental Quality (DEQ), Air Quality Division (AQD), conducted a scheduled inspection of the Enbridge Pipelines (Toledo) Inc. Stockbridge Terminal.

Environmental contacts:

Rhonda O'Leary, Senior Air Quality Analyst; 715-398-4756; rhonda.oleary@enbridge.com

James Snider, PE, CHMM, Environmental Specialist; 517-851-6010; james.snider@enbridge.com

Rusty L. Smith, Terminal Supervisor; 517-851-6001; rusty.smith@enbridge.com

Facility description:

This facility is a crude oil pipeline breakout station. It does not store crude oil, but instead distributes it to other facilities.

Emission units:

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	PTI No. or rule no.	Federal regulations, if applicable	Compliance status
EUTANK80	Storage tank with internal floating roof	160-98D	40 CFR Part 60, Subpart Kb	Compliance
EUTANK81	Storage tank with internal floating roof	160-98D	40 CFR Part 60, Subpart Kb	Compliance
EUTANK82	Storage tank with internal floating roof	160-98D	40 CFR Part 60, Subpart Kb	Compliance
EUTANK83	Storage tank with internal floating roof	160-98D	40 CFR Part 60, Subpart Kb	Compliance
EUTANK84	Storage tank with internal floating roof	160-98D	40 CFR Part 60, Subpart Kb	Compliance
EUTANK85	Storage tank with internal floating roof	160-98D	40 CFR Part 60, Subpart Kb	Compliance
EUTANK86	Storage tank with internal floating roof	160-98D	40 CFR Part 60, Subpart Kb	Compliance
EUTANK87	Storage tank with internal floating roof	160-98D	40 CFR Part 60, Subpart Kb	Compliance
EUTANK88	Storage tank with internal floating roof	160-98D	40 CFR Part 60, Subpart Kb	Compliance
300Gen-1	250 kW diesel standby engine installed 10/23/2015, began operations 6/15/2016	Rule 285(g)	40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ	Not operating
300Gen-2	250 kW diesel standby engine installed 11/16/2015, began operations 6/15/2016	Rule 285(g)	40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ	Not operating
205Gen-1	300 kW diesel standby engine installed 10/23/2015, began operations 6/15/2016	Rule 285(g)	40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ	Not operating

Regulatory overview:

This facility is considered to be a true minor source, rather than a major source of air emissions. A *major source* has the potential to emit (PTE) of 100 tons per year (TPY) or more, of one of the criteria pollutants. *Criteria pollutants* are those for which a National Ambient Air Quality Standard exists, and include carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds (VOCs), lead, particulate matter smaller than 10 microns, and particulate matter smaller than 2.5 microns.

This facility is also considered a minor or area source for Hazardous Air Pollutants (HAPs), because it was not considered to have a PTE of 10 TPY or more for a single HAP, nor to have a PTE of 25 TPY or more for combined HAPs.

This facility was issued Permit to Install (PTI) No. 160-98D, on 8/1/2013. All of the tanks at the facility, new and existing, are subject to 40 CFR Part 60, Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.* One tank, Tank 80, was built in 1974, but was modified after 7/23/1984, and therefore became subject to Kb.

The facility installed three diesel stand-by engines in 2015. They appear to be exempt under Rule 285(g) from the requirement of Michigan Air Pollution Control Rule 201 to obtain a permit to install, because they are each below 10 million Btu/hour. The engines are subject to 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, and 40 CFR Part 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, also known as the RICE MACT.

Fee Status:

This facility is considered a Category II fee facility, because it is subject to the federal New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart A and Kb. This facility is required to submit an annual air emissions report, via the Michigan Air Emissions Reporting System (MAERS).

Location:

The facility is in a generally rural/agricultural area, although there are several residences immediately adjacent to the site. About a dozen other residences are located several hundred feet to the west of the site. Roughly 1,000 feet north of this site and an adjacent petroleum facility is a neighborhood of about 20 homes. There are scattered residences to the southwest and southeast.

Recent history:

The facility has recently undergone a period of construction, as PTI No. 160-98D, issued on 8/19/2013, allowed for construction of five new tanks at the site, Tanks 84 through 88.

Arrival:

This was my first inspection of this facility, and I determined it would be helpful to have the primary environmental contact, Ms. Rhonda O'Leary, who works in Wisconsin, here for the inspection, in addition to the site environmental contact. Therefore, a time and date for this inspection was arranged in advance, so she could travel to the site.

No odors were detected as I arrived at 10:23 AM, and parked at the office. Weather conditions were mostly sunny, hazy, and humid, and 77 degrees F, with winds 0-5 miles per hour out of the south southwest. I brought fire retardant coveralls with me, as my understanding is that this is a requirement, for being onsite.

I met with Ms. Rhonda O'Leary, Senior Air Quality analyst, LP US Environment Operations, Liquids Pipelines, from the Superior, Wisconsin office, and with two Stockbridge Terminal representatives, Mr. James Snider, PE, CHMM, Environmental Specialist, and Mr. Rusty L. Smith, Terminal Supervisor. I presented my credentials, per AQD procedures, and the DEQ brochure *Environmental Inspections: Rights & Responsibilities*, also per AQD procedures.

Inspection:

EUTANK80 through EUTANK88; PTI No. 160-98D:

Tanks EUTANK80 through EUTANK88 are covered by the flexible group FGTANKFARM, in the PTI No. 160-98D Because of the large size of the site, we utilized a company vehicle to drive through the tank farm and observe the individual tanks and standby engines. No visible emissions were detected, and I did not detect any odors.

I. EMISSION LIMITS

SC 1. The VOC limit is 65 TPY, over a 12-month rolling time period.

Ms. O'Leary e-mailed to me a spreadsheet later this day (please see attached) of 12-month rolling emissions for each month in 2016, year to date (YTD). The month in 2016 with the highest 12-month rolling total was June, with 15.1 tons VOC. The next highest 12-month rolling total was 9.5 tons, for March, 2016. These values are well below the 65 TPY limit. The single month in 2016 with the highest monthly emissions of VOC was June, with 6.72 tons.

The MAERS report for the 2015 operating year shows that calculated emissions were 8.44 tons of VOC, below the 65 TPY limit.

SC 2. The limit for a single HAP is 2 TPY, over a 12-month rolling time period.

In the 2016 YTD report of 12-month rolling totals, the single HAP with the largest emissions was hexane. The month in 2016 with the highest 12-month rolling total was June, with 0.4 tons, January through May 2016 each had a rolling 12-month total of 0.3 TPY. These values are below single HAP limit of 2.0 TPY. The single month in 2016 with the highest monthly emissions of a HAP was June 2016, with 0.21 tons.

SC 3. The limit for toal HAPs is 3 TPY, over a 12-month rolling time period.

In the 2016 YTD report of 12-month rolling totals, the month with the highest total HAPs over a 12-month rolling period was June, with 0.7 TPY HAPs. This is below the 3 TPY limit. The single month in 2016 with the highest total HAP emissions was June, with 0.7 tons.

II. MATERIAL LIMITS

SC 1. The throughput limit is 208.05 million barrels, over a 12-month rolling time period.

The 2016 YTD report of 12-month rolling totals identified the month with the highest 12-month rolling total as March, with 46,171,919 barrels throughput. This is well below the limit of 208,050,000 barrels (208.05 million barrels). The single month with the highest monthly throughput in 2016 was January, with 4,655,830 barrels.

III. PROCESS/OPERATIONAL RESTRICTIONS

SC 1. The permittee is required to comply with 40 CFR Part 60 Subparts A and Kb, as they apply to the flexible group FGTANKFARM.

On 11/12/2015, the company notified AQD with a 30 day advance notification of fill for tank 81, pursuant to Section 60.113(b)(a)(5) of Subpart Kb.

On 5/9/2016, the company provided AQD with a *Notice of Initial Fill* for EUTANK84 through EUTANK88 on 6/17/2016, more than 30 days in advance of the actual fill date, as the NSPS requires a 30 day advance notification. They later contacted AQD to advise that the fill date for EUTANK86 was moved up to 6/16. Their 5/9 notice was still more than 30 days in advance of this new fill date.

The company provided AQD with a *Notice of Initial Fill and Certification of Control Equipment* for EUTANK 86, 87, and 88 on 6/22/2016. The initial fill date for EUTANK86 was 6/16/2016, the initial fill date for EUTANK87 was 6/17/2016, and the initial fill date for EUTANK88 was 6/20/2016. This is required by 40 CFR Part 60, Subparts A and Kb.

- The company indicated they are following Section 60.112b(a)(1)(I) by each tank having an IFR "that floats on the liquid in the tank at all times except when the roof is being landed on or floated off its roof leg supports."
- The company indicated they are following Section 60.112b(a)(1)(ii) by having each tank "equipped with a

mechanical shoe primary seal."
- The company indicated they are following Section 60.112b(a)(1)(iii) by having each floating roof float "in full contact with the stored liquid."
- The company indicated they are following Section 60.112b(a)(1)(iv) by having roof openings equipped with "a gasketed cover, seal, or lid that will be maintained in a closed position at all times(with no visible gap), except when the device is in actual use."
- The company indicated they are following Section 60.112b(a)(1)(v) by having automatic bleeder vents which "are gasketed and designed to open only when roof is being floated off or is being landed on the roof leg supports."
- Section 60.112b(a)(1)(vi), requirements for rim space vents, is not applicable, as these tanks "are not equipped with rim space vents."
- Section 60.112b(a)(1)(vii), a requirement for sample wells, is not applicable, as these tanks are not equipped with sample wells.
- The company indicated they are following Section 60.112b(a)(1)(viii) by having column wells be equipped with sliding gasket covers.
- The company indicated they are following Section 60.112b(a)(1)(ix) by having ladder wells be equipped with sliding gasket covers.
- The company indicated they are following Section 60.113b(a)(1) because a complete inspection of the IFR and seal for EUTANK86 and EUTANK 88 was done on 6/3/2016, and a complete inspection of the IFR and seal for EUTANK87 was completed on 6/13/2016. The notification states: "There were no holes, tears, or other openings found in the primary seal or seal fabric. There were no defects found in the internal floating roof."
- The company indicated they are following Section 60.113b(a)(4) because a complete inspection of the IFR and seal for EUTANK86 and EUTANK 88 was done on 6/3/2016, and a complete inspection of the IFR and seal for EUTANK87 was completed on 6/13/2016. This section requires repair of IFR defects, primary seals holes, tears, or other openings in the seal or seal fabric, secondary seal holes, tears, or other openings in the seal or seal fabric, gaskets which no longer close off the liquid surfaces from the atmosphere, or slotted membranes which have more than 10% open area, before refilling the storage vessels with volatile organic liquid (VOL). The notification states: "None of the conditions specified in this paragraph existed at the time the storage vessels were filled with VOL."

The company provided AQD with a *Notice of Initial Fill and Certification of Control Equipment* for EUTANK84 and EUTANK85 on 7/1/2016. The initial fill date for EUTANK84 was 6/29/2016, and the initial fill date for EUTANK85 was 6/28/2016. This is required by 40 CFR Part 60, Subparts A and Kb.

- The company indicated they are following Section 60.112b(a)(1)(I) by each tank having an IFR "that floats on the liquid in the tank at all times except when the roof is being landed on or floated off its roof leg supports."
- The company indicated they are following Section 60.112b(a)(1)(ii) by having each tank "equipped with a mechanical shoe primary seal."
- The company indicated they are following Section 60.112b(a)(1)(iii) by having each floating roof float "in full contact with the stored liquid."
- The company indicated they are following Section 60.112b(a)(1)(iv) by having roof openings equipped with "a gasketed cover, seal, or lid that will be maintained in a closed position at all times(with no visible gap), except when the device is in actual use."
- The company indicated they are following Section 60.112b(a)(1)(v) by having automatic bleeder vents which "are gasketed and designed to open only when roof is being floated off or is being landed on the roof leg supports.
- Section 60.112b(a)(1)(vi), requirements for rim space vents, is not applicable, as these tanks "are not equipped with rim space vents."
- Section 60.112b(a)(1)(vii), a requirement for sample wells, is not applicable, as these tanks are not equipped with sample wells.
- The company indicated they are following Section 60.112b(a)(1)(viii) by having column wells be equipped with sliding gasket covers.
- The company indicated they are following Section 60.112b(a)(1)(ix) by having ladder wells be equipped with sliding gasket covers.
- The company indicated they are following Section 60.113b(a)(1) because a complete inspection of the IFR and seal for EUTANK84 and EUTANK85 was done on 6/3/2016. The notification states: "There were no holes, tears, or other openings found in the primary seal or seal fabric. There were no defects found in the internal floating roof."

- The company indicated they are following Section 60.113b(a)(4) because a complete inspection of the IFR and seal for EUTANK84 and EUTANK 85 was done on 6/3/2016. This section requires repair of IFR defects, primary seals holes, tears, or other openings in the seal or seal fabric, secondary seal holes, tears, or other openings in the seal or seal fabric, gaskets which no longer close off the liquid surfaces from the atmosphere, or slotted membranes which have more than 10% open area, before refilling the storage vessels with volatile organic liquid (VOL). The notification states: "None of the conditions specified in this paragraph existed at the time the storage vessels were filled with VOL."

IV. DESIGN/EQUIPMENT PARAMETERS

SC 1. The permittee is to equip and maintain the flexible group FGTANKFARM with welded internal floating roofs (IFRs) with seals.

It is my understanding that they all the tanks are equipped with IFRs with seals. Examination of floating roof seals would require confined space entry, which I am not currently qualified to do.

V. TESTING/SAMPLING

NA, as there are no requirements here.

VI. MONITORIGN/RECORDKEEPING

SC 1. The permittee is to monitor and record in a satisfactory manner the crude oil throughput for FGTANKFARM.

Based on the 2016 YTD report of 12-month rolling totals, their recordkeeping appears satisfactory.

VII. REPORTING

NA, as there are no requirements here.

VIII. STACK/VENT RESTRICTIONS

NA, as there are no requirements here.

IX. OTHER REQUIREMENTS

NA, as there are no requirements here.

Diesel standby engines; Rule 285(g); 40 CFR Part 60, Subpart IIII, 40 CFR Part 63, Subpart ZZZZ:

None of the standby engines were operating, at this time. There were no visible emissions from the standby engines.

On 7/21/2016, Ms. O'Leary e-mailed to me documentation on the three diesel standby engines (please see attached). They are identified as follows:

300Gen-1, a 250 kW Cummins 250DQDAA generator set with QSL-G7 engine

300Gen-2, a 250 kW Cummins 250DQDAA generator set with QSL-G7 engine

205Gen-1, a 300 kW Cummins 300DQDAC generator set with QSL9-G7 engine.

Under 40 CFR Part 63, Subpart ZZZZ, Section 63.6590(c), Reciprocating Internal Combustion Engines (RICE) are to comply with the requirements of 40 CFR Part 60 Subpart IIII, and no further requirements

apply under ZZZZ. This requirement reads as follows:

(c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part..

I was advised that the generators met the RICE requirements for emergency engines by being below the maximum 100 hours of operation per year. I was advised that they each are run a couple hours per month, for operational readiness. AQD will ask for copies of their recordkeeping of hours of operation, to be reviewed at a later date.

There are two electrically operated pumps onsite. These do not appear to be subject to permitting or to RICE requirements, as they do not combust fuel and therefore are not sources of air emissions.

Conclusion:

There were no instances of noncompliance.

NAME _____ DATE 9/30/2016 SUPERVISOR B. M.