

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

N795145201

FACILITY: MRP Properties Company, LLC		SRN / ID: N7951
LOCATION: 1925 E SUPERIOR ST, ALMA		DISTRICT: Lansing
CITY: ALMA		COUNTY: GRATIOT
CONTACT: Richard Draper, Environmental Liability & Remediation Manager		ACTIVITY DATE: 07/16/2018
STAFF: Michelle Luplow	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled, unannounced inspection to determine compliance with PTI No. 397-07A.		
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow (author) and Sam Braman (AQD LDO)

MRP Properties contact: Rick Draper, Manager Environmental Liability and Remediation (rick.draper@valero.com)

Purpose:

Conducted an unannounced, scheduled compliance inspection of MRP Properties' (MRP) remediation of the former Total Petroleum site (B4258) to determine compliance with PTI No. 397-07A for 3 air strippers. This facility was last inspected August 2012.

Facility Background/Regulatory Discussion

MRP currently conducts remediation of soil and groundwater contamination at the former refinery site, which was owned by several companies including Total Petroleum, Ultramar Diamond Shamrock (UDS), and TPI Petroleum. MRP's office is located at 1610 East Superior Street in Alma, while the remediation site is located at 1925 E. Superior Street. Rick Draper, Manager, said that this site is considered a Treatment, Storage, and Disposal Facility (TSD) under DEQ's Waste Management and Radiological Protection Division regulations. R. Draper said MRP is responsible for all environmental liability at this site.

The refinery shut down in November 1999 and was demolished during 2003 by UDS. The remediation projects started in 1999, but the air strippers under PTI 397-07A were not installed and operating until November 2010. The former refinery site had its own waste water treatment plant (WWTP), the infrastructure of which is still present onsite, and R. Draper explained that the refinery's WWTP was used for groundwater treatment for the remediation activities, up until the the 3 air strippers permitted under PTI 397-07A were installed.

R. Draper says that within the next year they are planning to cease the air stripping remediation process and void the permit.

Attached is a map of the area currently being remediated.

Inspection:

Sam Braman and I arrived at MRP's location and met with Rick Draper, Manager, at approximately 11:30 a.m. on July 16, 2018. I had called a half hour prior to meeting with him to ensure that he would be available to conduct the inspection. I provided him with the January 2017 Permit to Install exemptions handbook, although this equipment would be regulated under the exemptions established prior to December 20, 2016.

PTI 397-07A: EU-AIRSTRIPPERS (3 Air Strippers)

This PTI is for 3 air stripping towers and their associated wells, sumps, piping and ancillary equipment located across the former refinery site. There are no add-on controls. R. Draper said that the air strippers work like a fractionation column. There are perforated plates within each stripper that allows air from a blower to bubble up through the plate perforations, consequently removing the VOCs/BTEX contaminants from the water.

All three air strippers are still onsite; however, R. Draper said that only 1 air stripper is currently operating, and at only half its capacity. They keep a 2nd air stripper on standby, which the flow is diverted to when the other air stripper needs to be taken out of service for maintenance (removal of the mineral build-up) before being put back into service.

Emission Limits, Monitoring/Recordkeeping & Reporting

MRP is limited to 6.0 tpy VOC and 1.0 tpy BTEX (benzene, toluene, ethylbenzene, xylene) on a 12-month rolling

basis. MRP is required to monitor and record the water flow rate, VOC concentration, and BTEX concentration of the influent water stream on a quarterly basis. Calculations from this data are required to be performed according to Appendix A or B of PTI 397-07A. Additionally, records for compliance with these limits are required to be kept, and quarterly submittals of the water flow rate, total VOC concentration of the influent water, total BTEX concentration of the influent water, and calculations of VOC and BTEX emission rates from the air strippers are required to be reported to the AQD on a quarterly basis.

The quarterly reports have been submitted every quarter since 2011. I reviewed the most recent report, First Quarter 2018, in more depth to ensure the BTEX and VOC calculations have been conducted according to Appendix A or Appendix B, for each quarter's emission calculations, in addition to verifying that the 12-month rolling emission rates for BTEX and VOC were correctly calculated. R. Draper said he determines water inlet and outlet concentrations of each contaminant the first month of each new quarter. These numbers are used to calculate the VOC/BTEX concentrations for all 3 months in that quarter. The gal/min flow rate of the water entering the strippers is recorded once for each month in the quarter. R. Draper explained that the flow meters are calibrated on an annual basis. The flow rate during the inspection was 68.3 gal/min.

BTEX and VOC emission rates on a 12-month rolling basis have been consistently much lower than their emission limits. The emission rates for BTEX and VOC, from the First Quarter 2018 report indicates 0.06 tons (1.0 ton limit) and 0.4 tons (6.0 ton limit) on a 12-month rolling basis, respectively.

There are currently no Material Limits, Process/Operational Restrictions, Design/Equipment Parameters or Testing/Sampling requirements.

Catalytic Oxidizer

MRP also operates an electric catalytic oxidizer (catox) on the former refinery site which is used to combust soil vapors from areas underground where the groundwater has receded (due to groundwater treatment water draw). Vacuum is applied to these areas to pull the contaminant vapors towards the catox for incineration. R. Draper says that they take samples from the gas stream leaving the catox with Tedlar bags and thus he has emissions data for these units. The data goes back to 2007.

This unit can be considered for exemption under the pre-December 20, 2016 exemption rules. Rule 336.1285(v) states that units which meet the following are exempt: "Any vapor vacuum extraction soil remediation process where vapor is treated in a control device and all of the vapor is reinjected into the soil such that there are no emissions to the atmosphere during normal operation." The vapors post-treatment are not injected back into the ground and therefore this exemption does not apply. Previous inspection reports have not addressed the exempt status of this unit.

I am working with R. Draper to determine if the unit can meet the emission limits in Rule 290. A follow up report will be entered in MACES with the results of the determination.

Compliance statement: MRP Properties is in compliance with all conditions of PTI 297-07A. The compliance status of the catalytic oxidizer will be determined at a later date.

NAME  DATE 7/18/18 SUPERVISOR 