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

U40170419940289		· · · · · · · · · · · · · · · · · · ·
FACILITY: BreitBurn Operating, L	P	SRN / ID: U401704199
LOCATION: Harris Road NE, Kalkaska Township		DISTRICT: Cadillac
CITY: Kalkaska Township		COUNTY: KALKASKA
CONTACT: Carolann Knapp, Environmental Specialist		ACTIVITY DATE: 05/10/2017
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: Self-Initiated Inspectio MACES yet.	n & Records Review - This is actually under SRN N	15362, but the SRN hasn't been entered into
RESOLVED COMPLAINTS:		<u> </u>

On Wednesday, May 10, 2017 Ms. Caryn E. Owens of the DEQ-AQD and Mr. Jeremy Howe of AQD conducted an unscheduled inspection of the Breitburn Operating – Broadwell Hulsapple 1-11A well site located on the southwest corner of M-72 and Harris Road NE in Kalkaska Township, Kalkaska County, Michigan (SRN: N5362). The field inspection and records review were conducted to determine compliance with Permit to install (PTI) 344-94. During the field inspection it was mostly sunny, approximately 60°F, with calm winds from the southwest.

Source Description:

The site consists of two metal buildings on the northern portion of the site. The northwestern most building was locked, so AQD didn't enter. The northeastern building contained a separator and a stack to a former compressor. The remainder of the building was vacant. The remainder of the site contained two heater treaters, a glycol dehydrator system, a pump jack, and a tank battery that contained 5 400 barrel above ground storage tanks. Upon arrival the site was quiet and appeared to be non-operational. AQD observed numerous monitoring wells around the western portion of the site. No visible emissions or odors were present during the inspection. An aerial photograph is attached for reference.

The original release at the site was due to a pipe that failed a pressure test from the southern-most heater treater to the tank battery. The piping was excavated and replaced prior to being put back into use. Soil impact was observed while replacing the piping. The soil venting began in December 1994, and the exhaust from the venting system was routed to an onsite compressor engine until November 2000, when the compressor was taken off line due to economic reasons. The soil vapor extraction (SVE) system began operating again in September 2005 and is monitored on a daily basis, and the exhaust gas flows through vapor phase carbon drums. Operations continue with air sampling the influent, intermediate, and effluent sample ports on a quarterly basis. Air sampling shows low concentrations of TPH-GRO, ethylbenzene, and xylene constituents. Based on the most recent analytical results from groundwater sampling, the release appears to be delineated and the groundwater impact appears to be limited to the well pad area and no offsite migration. The monitoring data shows that the MDEQ residential drinking water criteria have been met in all the wells since, June 2011.

Currently, the groundwater purging system is not operating, and will not operate again unless BTEX concentrations downgradient of the monitoring wells increase, and then Breitburn will re-evaluate the onsite operations. Additionally, Breitburn has shut down the air sparging and SVE systems to allow the vadose zone and aquifer to regenerate.

Evaluation Summary:

On September 13, 2005, Quicksilver Resources (now acquired by Breitburn Operating) submitted a letter to DEQ that indicated the permitted SVE system can operate under Rule 290 (R 336.1290(a)(ii)(C)). PTI 344-94 was not voided at this time. However, based on the most recent analytical sampling results AQD received, indicating the effluent air samples reported as non-detect, AQD agrees that PTI 344-94 can be voided, and no further actions are necessary at this time. Specific permit conditions that were reviewed are discussed below.

Compliance Evaluation:

<u>Special Condition (SC) 15:</u> Visible emissions from the SVE system shall not exceed 0% opacity. During the inspection no opacity was observed onsite.

<u>SC 16:</u> The VOC emission rate shall not exceed 0.00066 pounds per hour nor 0.003 tons per year. Based on the records reviewed the VOC emission rates were reported as 0 pounds per hour and 0 tons per year.

<u>SC 17:</u> Verification of VOC emission rates from the system and control by testing, at owner's expense, in accordance with Commission requirements, may be required for operating approval. The most recent analyses of air samples for VOC emission rates were completed on March 28, 2016. All of the effluent samples were reported as non-detect. The records are attached.

<u>SC 18:</u> The permittee shall not operate the system unless the control is installed and operating properly. At the time of issuance of this PTI, the facility captured the exhaust from the SVE system and routed them to the onsite engine, which is no longer at the site. Currently, if the SVE system begins operating again, the exhaust will be sent through carbon filters for control.

SC 19: The permittee shall monitor and record the flow rate and total VOC concentration of the influent stream. The most recent air sampling results are attached. The analytical results of the VOC concentrations of the influent showed concentrations of 1,2,4-Trimethylbenzene (5.6 μg/L), 1,3,5-Trimethylbenzene (1.8 μg/L), m,p-Xylene (2.8 μg/L), p-Xylene (1.7 μg/L), and Total Xylenes (4.5 μg/L). Additionally, the facility monitors the wells on a monthly basis and submits quarterly and annual remediation progress reports to the DEQ-Oil, Gas, and Minerals Division (OGMD). Based on review of the reports, only monitoring well MW-6 had concentrations detected. On June 30, 2016, Etylbenzene was detected at 1 μg/L, and Total Xylene was detected at 8 μg/L. The flow rate from the monitoring wells ranged between 20 to 40 standard cubic feet per hour (scfh). The OGMD reports are attached to this inspection report.

<u>SC 20:</u> The exhaust gases from the system and control shall be discharged unobstructed vertically upwards to the ambient air from a stack with a maximum diameter of 12 inches at an exit point not less than 20 feet above ground level. During the inspection, AQD did not observe a stack associated with the SVE system. A stack was observed extending from the northeast-most building that appeared to be formerly connected to a compressor engine.

MM NAME

DATE

SUPERVISOR