

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

P043948379

FACILITY: DTE Gas Company - GOOSE CREEK REMEDIATION SITE		SRN / ID: P0439
LOCATION: COUNTY ROAD 612 & DEWARD ROAD (GOOSE CREEK ROAD), KALKASKA		DISTRICT: Cadillac
CITY: KALKASKA		COUNTY: KALKASKA
CONTACT:		ACTIVITY DATE: 03/04/2019
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Inspection and Records Review		
RESOLVED COMPLAINTS:		

On Monday March 4, 2019, Caryn Owens of the DEQ-AQD conducted a scheduled on-site inspection of the DTE Energy (DTE) – Goose Creek soil vapor extraction (SVE) remediation system (P0439) located at the northeast corner of County Road and Deward Road (Goose Creek Road) in Blue Lake Township, Kalkaska County, Michigan. The SVE remediation system was located on the northeast corner of the Property outside of the fenced-in area of the compressor station. The purpose of this inspection was to determine the facility's compliance with permit to install (PTI) 56-13B. The site is currently an opt-out source for hazardous air pollutants (HAPs) and is a minor source for criteria pollutants. DEQ was unaccompanied by during the inspection.

Evaluation Summary:

Based on the field inspection and records review, the facility is in compliance with PTI 56-13B. No further information is necessary at this time. Specific permit conditions that were reviewed are discussed below.

On-site Inspection:

Soil and groundwater were impacted by natural gas condensate that was spilled at the facility. The remediation area consists of seven active air sparging and vapor extraction wells, and according to an email dated March 11, 2019 from Nick Swiger of DEQ-RRD, several upgrades were made to the remediation system to accelerate the cleanup activity at the site. The upgrades were:

- the installation and connection to the remediation system of sparge points (S) S-34, S-35, and S-36 in the fall of 2016;
- the installation and connection to the remediation system of Sparge/Vent (S/V) wells S/V-37, S/V-38, S/V-39, and S/V-40 in November of 2017;
- the installation and connection to the remediation system of S/V-41, S/V-42, S/V-43, and S/V-44 in May of 2018;
- and the installation and connection to the remediation system of S/V-45, S/V-46, and S/V-47 in July of 2018.

The wells are able to vacuum up water and air, which then goes through a knock-out tank to remove the water. The air exits the stack that contains a muffler, located west-northwest of the remediation system, and the water is ran through carbon absorption tanks and then re-injected back into the ground. EnviroSolutions completes monthly checks of the remediation system and records the flow rate of the system. The stack gas is collected in summa canisters for analysis, and bagged air samples are screened with a PID. According to the diagrams the impacted soil and groundwater plumes have been reduced to within the property boundaries.

During the field inspection, the weather Conditions were mostly sunny and approximately 6 degrees Fahrenheit, and winds from the west approximately 5 miles per hour. There was no path to the trailer, and the snow was about 2 feet deep. AQD did not have access to get inside the trailer, but the some of the wells, stack, and trailer were visible during the inspection. No odors or visual emissions were present during the field inspection.

Compliance Evaluation:

EUSOIL: A vacuum extraction remediation system that consists of SVE wells, air sparging, vacuum blowers, and an air flow distribution system with an emissions stack.

- **Emission Limits:** EUSOIL is limited to 25 tons per 12-month rolling time period of volatile organic compounds (VOCs), less than 9 tons per 12-month rolling time period per individual hazardous air pollutant (HAP), and less than 22.5 tons per 12-month rolling time period for aggregate HAPs. Based on

the records reviewed, the total VOCs were reported at 0.0266 tons per 12-month rolling time period, and the HAPs were reported at 0.0073 tons per 12-month rolling time period, which are far below the permitted emission limits. The records are attached.

- Material Limits, Process/Operational Restrictions, Design/Equipment Parameters, Testing/Sampling, Reporting, and Other Requirements have no applicable requirements for EUSOIL.
- **Monitoring/Recordkeeping:** As previously stated, EnviroSolutions collects a flow rate on a monthly basis, and the VOC concentration is collected and analyzed on an annual basis. The facility keeps records of monthly and 12-month rolling time period calculations of VOC, individual HAPs, and aggregate HAPs in a manner acceptable to the DEQ.
- **Stack Restrictions:** Based on visible observations during the field inspections, the stack of the EUSOIL appeared in compliance with the permitted limits.

NAME Caryn Owens

DATE 4/9/19

SUPERVISOR [Signature]