

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

P043928833

FACILITY: DTE Gas Company - GOOSE CREEK FACILITY		SRN / ID: P0439
LOCATION: COUNTY ROAD 612 & GOOSE CREEK/DEWARD ROAD, KALKASKA		DISTRICT: Cadillac
CITY: KALKASKA		COUNTY: KALKASKA
CONTACT:		ACTIVITY DATE: 03/13/2015
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled Inspection and Records Review		
RESOLVED COMPLAINTS:		

On Friday, March 13, 2015, 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. An access gate ~~was~~ to the main gas facility was locked at the time of the inspection, but the SVE remediation system was located on the northeast corner of the Property outside of the fenced in area. The purpose of this inspection was to determine the facility's compliance with permit to install (PTI) 56-13A. The site is currently an area source for hazardous air pollutants (HAPs), and is a true minor source for criteria pollutants. DEQ was accompanied by Mr. Donal Brady, PE of EnviroSolutions (DTE's consultant for the remediation system). DEQ forgot to give Mr. Brady the inspection brochure during the inspection, but a brochure will be emailed to the company with this inspection report.

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. 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 ~~run~~ through carbon absorption tanks and then re-injected back into the ground. EnviroSolutions completes weekly 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. Mr. Brady doesn't anticipate this system operating for another year since the facility is almost cleaned up to below clean-up criteria. 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 and total HAPs were both reported at 0.01 tons per 12-month rolling time period, which are far below the permitted emission limits. The record sheet is 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 weekly basis, and the VOC concentration is collected and analyzed on a quarterly 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.

**Summary:**

Based on the field inspection and records review, the facility is in compliance with PTI 56-13A. DEQ is currently working on PTI 56-13B, which will reduce VOC sampling from a quarterly basis to an annual basis because the analytical results indicate VOC and HAP emission data far below the permitted limits. The flow rate will still be recorded at least on a monthly basis. No further information is necessary at this time.

NAME Caryn Owens

DATE 3/16/15

SUPERVISOR 