

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

N280441317

FACILITY: CENTRAL SANITARY LANDFILL		SRN / ID: N2804
LOCATION: 21545 CANNONSVILLE RD, PIERSON		DISTRICT: Grand Rapids
CITY: PIERSON		COUNTY: MONTCALM
CONTACT: Roger Rockburn , Landfill Manager		ACTIVITY DATE: 08/31/2017
STAFF: David Morgan	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MAJOR
SUBJECT:		
RESOLVED COMPLAINTS:		

At 9:30 A.M. on August 31, 2017, Air Quality Division staff Dave Morgan conducted a scheduled inspection of the Central Sanitary Landfill located in Pierson. The purpose of the inspection was to determine the facility's compliance with state and federal air pollution regulations as well as Renewable Operating Permit (ROP) No. MI-ROP-N2804-2014. Accompanying AQD staff on the inspection was Roger Rockburn, Landfill Manager.

FACILITY DESCRIPTION

The Central Sanitary Landfill (CSL) is a solid waste landfill which accepts municipal waste, non-hazardous special waste, and construction and demolition debris and has a design capacity of 13.0 million cubic meters. Because the design capacity was increased after May 30, 1991, the landfill is considered a new source with respect to the requirements of 40 CFR Part 60, Subpart WWW and an existing source with respect to the requirements of the new Municipal Solid Waste Landfill Emission Guidelines under Subpart Cf. On January 31, 2017, a Tier II calculation was provided for the Central Sanitary Landfill which showed estimated NMOC emissions of 59.44 MG/year (see regulatory discussion in Activity Report No. N280438629). Since NMOC emissions were determined to be above the 50 Mg/year threshold in the Subpart WWW requirements and above the 34 Mg/year threshold in the Subpart Cf requirements, the company will be required to install a gas collection and control system. It is noted that the requirements of Subpart WWW are still applicable until a state plan to implement the Subpart Cf rule is developed.

COMPLIANCE EVALUATION

EULANDFILL<50:

Because NMOC emissions were determined to be above 50 megagrams, the company is required to install a landfill gas collection and control system under Subpart WWW within 30 months of May 2016 (or by November 2018). The company submitted a GCCS design plan in May 2017 which is currently being reviewed by AQD. The company does have an existing active gas collection and control system installed prior to Subpart WWW requirements that consists of approximately 45 vertical and horizontal wells, and an open flare. It is noted that because the facility has an active gas collection system, once the design plan is approved the company will be required to operate and monitor the collection system in accordance with Subpart WWW even if prior to the November 2018 compliance timeline. The company does monitor and balance the gas collection system at least once per month, but no methane surface monitoring is conducted.

AQD staff and Mr. Rockburn toured the site. CSL recently completed final cover activities on the north third of the landfill. At the time of the inspection, the gas collection system was being expanded with the installation of an additional 13 vertical and horizontal wells. All the vertical wells had been drilled and the contractors were tying into the existing vacuum system. Landfill gas odors were observed on the south side of the landfill on the upper haul road. Mr. Rockburn hoped that the new vertical wells and some new horizontal wells (to be placed in new waste lifts) would mitigate the landfill odor. It is noted that landfill gas odors were observed on the U.S.-131 highway upon approach to the facility. AQD has not received any recent complaints regarding the landfill.

The company is maintaining all recordkeeping on-site and in accordance with the ROP. These records include the year-by-year waste acceptance rate, waste in place records, the design capacity report, and cover inspection records. As of March 2017, the estimated waste in place was 8,015,314 cubic yards. The next waste survey will occur in March 2018. Well monitoring records are also kept.

All semi-annual and annual certification reports have been submitted in accordance with the ROP and Subpart WWW.

EUOPENFLARE:

In 2006, the company installed an open flare with a rated capacity of 4,700 scfm to control captured landfill gas. The gas flow to the flare ranges from around 800 to 1,000 cfm. At the time of the inspection, flow to the flare

was around 596 scfm.

The flare is fully operational and operates on a continuous basis. No visible emissions were observed from the flare during the inspection. The company electronically monitors and records the gas flow rate and presence of the pilot flame by monitoring the flame temperature as specified in the ROP. For the period from July 2016 to June 2017 company records show there were approximately 977 hours of unrecorded temperature data due to a problem with the Yokogawa data logger. Due to the number of recordkeeping downtime events, a violation notice will be sent. According to Mr. Rockburn, a contractor has tried to fix the problem with the data logger with no success. The company has no other way to verify that the flare is operating other than a temperature record or visual observation. Attached to this report are flare downtime records. Additional downtime events were documented for power surges/outages and maintenance. During the inspection, the thermocouple on the flare showed a temperature above 1,300°F and a flame was present as required by the ROP. If there is no flame, a sensor is tripped and the gas mover equipment is shutdown. Attempts to relight the flare is conducted automatically. If unsuccessful, the flare is relit manually.

The company has an operations manual on site for proper maintenance and operation. The company conducts daily observations, as well as weekly and monthly maintenance. All maintenance activities are recorded in a log book which was reviewed on site.

EUAIRSTRIPPER:

There is a groundwater air stripping unit (QED Environmental Systems Model EZ12.6SS) installed under Rule 290. Exhaust air is vented through a stack with a 6 inch diameter and 7 foot height from the ground. No visible emissions were observed from the air stripper during the inspection.

The company conducts semi-annual monitoring of the VOC concentration in the influent and effluent of the air stripper in order to calculate emissions. On a monthly basis, the company calculates VOC emissions using the semi-annual VOC concentrations. From June 2016 to July 2017 records show VOC emissions were calculated to be no higher than 0.058 pounds per month which is below the 1,000 pound per month limit. In addition, all emissions are below 20 pound per month thus meeting emission limits for constituents with an applicable ITSL or IRSL. Records are attached.

EUASBESTOS:

The Central Sanitary Landfill does not accept asbestos waste and there is no documentation that the site has accepted it in the past. This section of the ROP should be revisited during the next ROP renewal period.

EUCOLDCLEANER:

No issues with the cold cleaner were noted.

MISCELLANEOUS:

There are several liquid storage tanks at the facility which are exempt from permitting under Rule 284.

A landfill gas-to-energy facility that will be operated by North American Natural Resources, but reside on Central Sanitary Landfill property, is currently under construction and anticipated to start operation in early 2018. The facility was permitted under Permit to Install No. 45-17.

SUMMARY

A violation notice will be sent for violations identified above. Records are attached to the report.

NAME  DATE 9/11/17 SUPERVISOR 