

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

N329436033

FACILITY: Ottawa County Farms Landfill		SRN / ID: N3294
LOCATION: 15550 68th Avenue, COOPERSVILLE		DISTRICT: Grand Rapids
CITY: COOPERSVILLE		COUNTY: OTTAWA
CONTACT: Debbie Nurmi , Environmental Manager		ACTIVITY DATE: 08/18/2016
STAFF: David Morgan	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT:		
RESOLVED COMPLAINTS:		

At 10:00 A.M. on August 18, 2016, Air Quality Division staff Dave Morgan conducted a scheduled inspection of the Ottawa County Farms Landfill (OCFL) located at 15550 68th Avenue in Coopersville. The purpose of the inspection was to determine the facility's compliance with Renewable Operating Permit No. MI-ROP-N3294-2013 and state and federal air pollution regulations. Accompanying AQD staff on the inspection of the OCFL was Debbie Nurmi, Environmental Manager, and Rob Carr, Site Manager.

FACILITY INFO

The OCFL is a municipal solid waste landfill, with a design capacity of 13.0 million cubic meters, subject to the requirements of 40 CFR Part 60, Subpart WWW. The landfill is also subject to the National Emission Standard for Hazardous Air Pollutants under 40 CFR Part 63, Subpart AAAA for Municipal Solid Waste Landfills. Because the Non-methane Organic Compound (NMOC) emissions exceed 50 megagrams per year OCFL is required to have a gas collection and control system in place. Currently gas from closed and active portions of the landfill are collected by an active gas collection system and directed to the Ottawa Generating Station (OGS) where internal combustion engines burn the landfill gas to produce electricity. Excess gas is used by Resource Recovery Corporation (RRC) to recover metal and sand from used foundry sand. The OCFL and OGS are considered one stationary source, despite having two separate ROPs. RRC is not considered part of the stationary source.

COMPLIANCE EVALUATION

(EULANDFILL & EUALGCS/FGLGCS):

As stated, the landfill has an active landfill gas collection and control system on both closed and interim cover areas. The NSPS and ROP require that each interior wellhead be operated with a landfill gas temperature less than 131°F and a nitrogen level less than 20% or oxygen (O2) level less than 5% and monitored monthly. If a well exceeds one of these operating parameters, action is to be initiated to correct the exceedance within 5 calendar days. If the exceedance is not corrected within 15 calendar days of the first measured exceedance, then the gas collection system is to be expanded within 120 days of the initial exceedance to correct the problem. OCFL uses SCS Field Services to conduct well monitoring/tuning and well maintenance on a monthly basis as required by the NSPS and ROP. At a minimum, the vacuum pressure, O2 concentration and temperature at each wellhead is monitored and recorded.

According to company records from August 2015 to July 2016 various wells had O2 and pressure exceedances that occurred beyond the 15 day re-monitoring period. These wells were either approved for an alternate compliance timeline, abandoned or redrilled. Some wells above 5% O2, were associated with the leachate collection system and had prior approval from AQD for a higher O2 operating value. Records were reviewed on site in addition to records provided through the ROP certification and those submitted after the inspection (attached).

The surface concentration of methane is monitored on a quarterly basis in accordance with the NSPS and ROP. A map was provided which showed the route of sampling for each monitoring event. During 2015 and 2016, quarterly surface monitoring reports showed no methane concentrations above 500 ppm. A copy of 2016 results are attached. It is noted that the company is also conducting additional surface monitoring in the stock pile area where various wells were abandoned in June 2016. Surface methane concentrations were not above 500 ppm in this area during the extra monitoring events. According to company records, all calibration was conducted prior to each surface monitoring event in accordance with the NSPS and ROP.

Records pertaining to maximum design capacity, year-to-year acceptance rate, and amount of waste in place are maintained on site in accordance with the NSPS. As of April 2016 there were 22,854,905 cubic yards of waste in place at the site. The company has a permitted capacity of 26,740,000 cubic yards. In May 2016, OCFL submitted a construction permit application to the Office of Waste Management and Radiological Protection for a horizontal and vertical expansion of the landfill. This expansion will increase the size of the landfill by approximately 31,845,000 cubic yards. It is noted that the company provided a demonstration that indicated that the expansion

would not trigger a modification under New Source Review and therefore the expansion can be considered exempt under Rule 285(aa). In addition a gas collection and control system design plan was submitted in accordance with the NSPS for the proposed expansion. This design plan is currently under review by AQD.

Enclosed Flare (EUENCLSDFLARE):

In 2008 a 3,700 scfm enclosed flare was installed to ensure that the landfill maintains compliance with the control requirements of the NSPS should the Ottawa Generating Station shutdown. The flare is only used as backup, but the enclosed flare is operated roughly twice per month for the OCFL. Each time the enclosed flare is fired-up, a startup report is created.

An initial performance test was conducted in November 2009 to verify the reduction efficiency for NMOC in accordance with applicable permit and NSPS requirements.

The company is keeping records of the 12-month rolling carbon monoxide (CO) emission rate, the landfill gas usage rate and the average Btu content of the landfill gas burned. According to company records for the period from August 2015 to July 2016, the CO emission rate was 0.01 tons (which is below the 97.3 ton permit limit), the total landfill gas burned was 167,192 cubic feet, and the average heat input was 96 million Btu.

The equipment has a flow device which monitors gas flow as well as a heat sensing device to monitor the presence of the flame when it is operated.

Asbestos Waste (EUASBESTOS):

OCFL continues to accept asbestos waste which is placed in designated locations within the landfill. The asbestos waste is placed in columns to eliminate the need to disturb those areas. The company also surveys the asbestos waste in the landfill for each lift of asbestos waste to get the best dimensional picture of the waste location. This is all conducted in accordance with the ROP. The landfill maintains all required asbestos shipment records, which were reviewed on-site, in accordance with the ROP. Signage and site barriers were appropriate.

Cold Cleaner (EUCOLDCLEANER):

No non-compliance issues have been identified.

Start-up, Shutdown, Malfunction:


The company maintains a start-up, shutdown, malfunction plan in accordance with 40 CFR Part 63, Subpart AAAAA for Municipal Solid Waste Landfills. DM observed the plan and all records implemented as a result of the plan.

Miscellaneous:

There were no odors verified off site.

SUMMARY

The Ottawa County Farms Landfill appears to be in compliance with all applicable requirements. Records are attached.

NAME 

DATE 8/31/16

SUPERVISOR 