DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

N363426871

FACILITY: HARLAND SANITARY LANDFILL/MANISTEE COUNTY LANDFILL		SRN / ID: N3634
LOCATION: 3890 CAMP ROAD, MANISTEE		DISTRICT: Cadillac
CITY: MANISTEE		COUNTY: MANISTEE
CONTACT: Debbi Nurmi , Environmental Manager		ACTIVITY DATE: 09/11/2014
STAFF: Rob Dickman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled inspection of this ROP source.		
RESOLVED COMPLAINTS:		

Inspected this landfill as per ROP number MI-ROP-N3634-2010. No odors were noted downwind and outside of the facility. All haul roads, the plant yard, and the active parts of the landfill had no noticeable visible emissions during the inspection and appeared to be in good repair.

This facility is subject to 40 CFR 60 Subpart WWW. As such, the facility is required to perform testing every five years for non-methane organic compounds (NMOC). This testing is described in the Subpart as Tier II testing. If the testing and subsequent modelling demonstrate NMOC emissions less than 50 Megagrams per year (Mg/yr) (49.2 tons per year), many of the conditions in the ROP do not apply. Following are the results of the inspection by applicable permit condition:

SOURCE-WIDE CONDITIONS

- I. EMISSION LIMITS No emissions limits
- II. MATERIAL LIMIT(S) No material limits
- III. PROCESS/OPERATIONAL RESTRICTION(S) No process or operational restrictions.
- IV. DESIGN/EQUIPMENT PARAMETER(S) No design or equipment restrictions
- V. TESTING/SAMPLING No testing or sampling requirements
- VI. MONITORING/RECORDKEEPING No monitoring or recordkeeping requirements
- VII. REPORTING
- 1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.
- VIII. STACK/VENT RESTRICTION(S) There are no stack restrictions
- IX. OTHER REQUIREMENT(S)
- 1. The conditions contained in the ROP for which a Consent Order is the only identified underlying applicable requirement shall be considered null and void upon the effective date of termination of the Consent Order. The effective date of termination is defined for the purposes of the conditions as the date upon which the Termination Order is signed by the Chief of the AQD. Consent Order 8-2010 was terminated in June of 2013.

<u>EULANDFILL<50</u> - This emission unit is of a landfill which has a design capacity greater than 2.5 million megagrams and 2.5 million cubic meters, but actual emissions based upon an established Tier 2 value in the landfill calculation, is less than 50 megagrams. This landfill also has received a volume expansion (increased the design capacity) permit from the Department of Natural Resources and Environment, since May 30, 1991, and therefore making the landfill subject to NSPS WWW. Landfill gas from the landfill is controlled by a sulfur removal system and flare.

- I. EMISSION LIMIT(S) SOx emissions are limited to 36 tons per year based on a 12-month rolling time period. In the last 12 months, SOx emissions were approximately 5.0 tons.
- II. MATERIAL LIMIT(S) Landfill gas H2S concentration is limited to 400 ppm post treatment. In the last 12 months, the outlet concentration to the flare was <100 ppm.

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall only burn treated landfill gas in the flare except as provided in the approved malfunction abatement/operation & maintenance plan. The MAP for this facility was submitted in September of 2010 and approved in November of 2010.
- 2. On and after the date of trial operation of the sulfur removal system, the permittee shall not operate the flare unless the sulfur removal system is installed, maintained, and operated in a satisfactory manner. At no time in the last 12 months was there an incident of this nature.

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall have the sulfur removal system and flare installed, maintained and operated at all times except during periods of malfunction and maintenance. This equipment is operated at all times except during periods of malfunction and maintenance.
- 2. The permittee shall install, calibrate, and maintain a gas flow measuring device that shall continuously record the total actual flow of landfill gas to the sulfur removal system and flare. There is a device to measure flow on the system and it is calibrated at least annually.

V. TESTING/SAMPLING

- 1. If the permittee elects to perform Tier 2 or Tier 3 testing, the permittee shall perform the testing in accordance with Appendix 5 and use the resulting data in the emission calculations prescribed in Appendix 7 or the most recent version of USEPA's Landfill Gas Emissions Model (LandGEM). Tier 2 testing was performed in November 2012. NMOC emissions based on LandGEM modelling and this testing were 9.0 tons for 2013.
- 2. If the tested Tier 2 NMOC mass emission rate is less than 50 megagrams per year, the permittee shall submit a periodic estimate of the emission rate report as provided in § 60.757(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified § 60.754. This emissions rate report is through the MAERS reporting system. This reporting has been performed annually and has been previously reviewed. Please see MACES for further details.

VI. MONITORING/RECORDKEEPING

- 1. Except as provided in § 60.752(b)(2)(i)(B), the permittee subject to the provisions of § 60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered § 60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable. This report was available for review at the time of the inspection.
- The permittee shall calculate the annual NMOC emission rate using the most recent version of USEPA's Landfill Gas Emissions Model (LandGEM). NMOC emissions based on LandGEM modelling and this testing were 9.0 tons for 2013.
- 3. The permittee shall compare the calculated NMOC (Equation 1 or Equation 2) mass emission rate to the standard of 50 megagrams per year. If the calculated emission rate is <50 Mg per year, the permittee shall submit an annual emissions report.
- 4. Recalculate the NMOC emission rate annually, except as provided for in 40 CFR 60.757(b)(1)(ii), using the procedures specified in § 60.754(a)(1) until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed. This emissions rate report is through the MAERS reporting system. This reporting has been performed annually and has been previously reviewed. Please see MACES for further details.
- 5. The permittee shall monitor and record on a monthly basis the average Btu content of the landfill gas burned in the flare. This testing is being performed.

- 6. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling SO_x emission calculations for the flare. These calculations are being performed and were available for review.
- 7. The permittee shall monitor and record, on a weekly basis, the hydrogen sulfide concentration of the treated landfill gas. A sample of this monitoring is attached. It was noted on this reporting that some of the results were listed at >25 ppm. This is an error as the detection limit for the method used is 25 ppm and these results should read <25 ppm. The facility will correct this reporting.

VII. REPORTING

- 1- 3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.
- 4. The permittee shall submit an annual NMOC emission rate report to the District Supervisor. This emissions rate report is through the MAERS reporting system. This reporting has been performed annually and has been previously reviewed. Please see MACES for further details.

VIII. STACK/VENT RESTRICTION(S) – This stack appears in compliance with criteria listed in the ROP and does not appear to have been recently altered.

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of 40 CFR Part 60 Subpart A and WWW, "Standard of Performance for Municipal Solid Waste Landfills", as they apply to the flare. This facility is in compliance with the Subpart.

EUASBESTOS - This landfill is actively or has accepted asbestos waste in the past. However, they have not accepted any asbestos waste in the last 12 months (actually not since the last inspection). Therefore, the conditions associated with it do not apply for this inspection.

<u>FGCOLDCLEANERS</u> - Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979. There is one cold cleaner on site that is a small parts cleaners serviced by an off site contractor. It appeared in good repair and the cover on it was closed. It was properly signed and the procedures for use of it and MSDS for the solvent also were posted. No odors were noted around the unit and housekeeping around it was good.

<u>FGRULE290</u> - Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290. This facility has no applicable Rule 290 equipment on site.

At the time of the inspection, this facility was in compliance with their applicable air permitting.

NAME

DATE

SUPERVISOR