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

N600826031

FACILITY: Oakland Heights Development, Inc.		**SRN / ID:** N6008
LOCATION: 2350 Brown Road, AUBURN HILLS		**DISTRICT:** Southeast Michigan
CITY: AUBURN HILLS		**COUNTY:** OAKLAND
CONTACT: Robb Moore , Environmental Manager		**ACTIVITY DATE:** 07/11/2014
STAFF: Rebecca Loftus	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT:		
RESOLVED COMPLAINTS:		

On July 11, 2014, I, Rebecca Loftus, Department of Environmental Quality (DEQ), Air Quality Division (AQD), conducted an inspection of Oakland Heights Development, Inc. (Oakland Heights), SRN: N6008, located at 2350 Brown Road, Auburn Hills, Michigan. The purpose of this inspection was to determine the facility's compliance with Federal Clean Air Act, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act of 1994, PA 451, as amended, Michigan's Air Pollution Control Rules, and Renewable Operating Permit (ROP) No. M ROP-N6008-2010.

Upon arriving at the facility, I met with Mr. Rob Moore, Environmental Engineer for Republic, 810-655-6906, rmoore@rebulicservices.com. Below is a summary of my findings during my inspection and file review.

Facility Overview

Oakland Heights (operated by Republic Services) is a municipal solid waste landfill located at 2350 Brown Road in Auburn Hills, Oakland County, Michigan.

As a Type II Sanitary Landfill, Oakland Heights accepts and landfills municipal solid waste (MSW) and inert wastes such as construction debris, demolition debris, foundry sand, ash and low-level contaminated soils. The facility formerly accepted wastes containing asbestos. The waste materials arrive on-site in a variety of vehicles that have potential to generate fugitive dust (particulate matter emissions); this is controlled by frequent wetting and sweepin the entrance roads.

After waste is transported to the facility, it is placed in one of the active working areas (cells) and is covered daily w soil or other cover materials. Oakland Heights currently has two distinct sections: Phase I is the old clay line cell a the remainder of the landfill is divided into cells A through F. At the time of my inspection, waste was being placec cells E and F.

Over time, the waste materials decompose producing landfill gas (LFG). The LFG is collected through an active lar gas collection system, which consists of wells, headers, and gas mover equipment. Currently, Oakland Heights ha approximately 92 extraction wells and is collecting LFG at flow rates of approximately 2000 scfm. The collected LF goes to the on-site blower building and can be routed to one of two flares located on-site or the LFG can be sold of to the General Motors Orion Assembly Plant (GM) for use as fuel in their boilers and/or reciprocating internal combustion engines.

The landfill has a design capacity of 19.9 million mega grams and is therefore subject to the National Standards of Performance for Municipal Solid Waste Landfills, 40 CFR, Part 60, Subpart WWW, and is permitted under ROP No ROP-N6008-2010. The ROP has enforceable limits/conditions for the following emission units: EULANDFILL, EUALGCS, EUPERENNIALFLARE, EULFG&EFLARE, and EUASBESTOS.

Although the landfill is operated by Republic, the wellfield and flares are monitored by Monitoring Control and Compliance, Inc. (MCC) and testing/calibrations/records are completed by Air Quality Specialist (AQS). Most reco were available on-site at the time of my inspection; Mr. Moore emailed the remaining data collected by MMC and A on July 25, 2014.

Summaries of the data reviewed and my inspection observations are provided below.

Landfill/Gas Collection System

Oakland Heights ROP has two sections covering the landfill and gas collection system, EULANDFILL and EUALG During my inspection, Republic provided me with copies of the surface methane monitoring reports, monthly integr

checks, waste acceptance rates/design capacity, and the LFG NSPS parameters report. The records provided are needed to demonstrate compliance with the ROP and federal landfill regulations.

The 1st and 2nd quarterly methane surface scans were conducted on March 28, 2014, and June 11, 2014 (see attached reports). Both reports indicate that there were no locations at Oakland Heights with a measured surface concentration of methane greater than 500 part per million.

According to the records, integrity checks of the landfill cover are conducted on a monthly. These records indicate where corrective actions are needed (see attached summary).

In 2013, Oakland Heights processed 263,331 tons of waste. The most recent permitted design capacity was appro by staff in DEQ's Waste Division in December 2009, making total capacity 18,904,931 cubic yards.

Oakland Height's wellfield currently consists of 92 collectors (including dual extraction wells). On a monthly basis, monitors temperature, oxygen, and pressure for each NSPS subject well (see attached CD for data). According to these records and Oakland Height's semi-annual reports, they are documenting instances in which wells have temperature, oxygen, and/or pressure exceedances. In the instances in which an exceedance cannot be corrected within 15 days, Republic has requested higher operating variance, alternative timelines, and/or to decommission w (see file for individual request). Mr. Moore also provided a copy of the summary of wells under variances (see attached).

For the dual extraction wells, Mr. Moore explained that they are all currently located on the south slope in Phase I. Because of PCB contamination, material from dual extraction wells is sent to an activated carbon treatment system then discharged to DWSD.

In addition to the above mentioned records, I reviewed the NSPS on-site inspection check list with Rob Moore (see attached). I did not note any changes from the previous AQD inspection checklist.

Flares

Oakland Heights currently has two enclosed flares; the first was installed in 1998 and has a capacity of 3000 scfm the second was installed in 2003 and has a capacity of 1800 scfm. If the GM Orion Boilers/Engines go off-line, Oakland Heights currently has enough flare capacity to serve as back-up control.

The flares are continuously monitored and the temperatures are recorded every two minutes (see attached CD for data). The flares can be monitored remotely via a reporting system. Flare downtime is appropriately reported in th Annual/Semi-Annual reports as needed.

During my inspection, I observe the following:

	Design Flow (scfm)	Flow (Mscf) at inspection	Compliance Temps* (°F)	Temp (°F) at inspection
LFGE (main flare)	3000	1300	1425	1550
Perennial Flare	1800	600	1425.5	1680
GM	---	0	---	---

* established during stack tests performed in 1998 and 2003.

The Malfunction Abatement/Preventative Maintenance Plans required by the permit was received by the AQD on J 8, 2010 (see file for documents).

Asbestos

At this time, Oakland Heights does not accept friable asbestos waste. The flexible group conditions are listed in th ROP because in the past asbestos waste was accepted.

MAERS

For 2013, Oakland Heights reported the following emissions:

Pollutant	Tons
CO	21.9
NMOC	10.7
NOx	13.1
PM10	21.7
PM2.5	3.7
SO2	2.4
VOC	<0.5

The reported emissions appear to be consistent with the records reviewed.

Miscellaneous equipment

At this time, there are no reciprocating internal combustion engines at the landfill.

There is one cold cleaner located in the garage. The cold cleaner appears to be exempt from obtaining a Permit tc Install (PTI) pursuant to Rule 285(r)(iv). Based on my observations, the cold cleaner appears to be meeting the conditions listed in the ROP under FGCOLDCLEARNERS.

There are also three 10,000 Btu/hr natural gas heaters located in the buildings on-site (these are not listed in the ROP). This equipment appears to be exempt from obtaining a Permit to Install pursuant to Rule 282(b)(i).

Additional Information

Currently, Republic sends unprocessed LFG to GM as previously it was only used in GM's boilers. Attached is a summary of the amount of gas sent to GM.

During my inspection, Mr. Moore explained, WMRE of Michigan, LLC, is installing and will be operating a LFG treatment system next to the blower station to further treat the LFG before it is sold off-site to GM. The additional treatment system is required so that GM can burn LFG in their new engines; it will remove particulate to at least th micron level, compress the landfill gas, and remove enough moisture to ensure good combustion of the landfill gas when used as fuel off-site, therefore guaranteeing that the intent the destruction of NMOC will be maintained. With new system, WMRE will record the pressures and volumes sent to GM.

Conclusions

Based on information gathered during the inspection and records reviewed, Oakland Heights appears to be in compliance with the Federal Clean Air Act, Michigan's Air Pollution Control Rules, and the conditions of ROP No. M ROP-N6008-2010.

NAME Rebecca Loftus DATE 8/12/14 SUPERVISOR CJE