

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

N600728984

FACILITY: Tri-City RDF		SRN / ID: N6007
LOCATION: 426 N. Ruth Rd., CARSONVILLE		DISTRICT: Saginaw Bay
CITY: CARSONVILLE		COUNTY: SANILAC
CONTACT: Lori Winters , Compliance Manager		ACTIVITY DATE: 03/23/2015
STAFF: Gina McCann	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Inspection to determine compliance with MI-ROP-N6007-2012, NSPS WWW and MACT AAAA.		
RESOLVED COMPLAINTS:		

I (glm) conducted an announced site inspection at the Tri City Recycling and Disposal facility (RDF). Tri City RDF is a Type II municipal solid waste landfill which is owned and operated by Waste Management of Michigan, Inc. The landfill accepts municipal and solid waste, construction debris, foundry sand, ash and contaminated soils. No odor was noticed as I drove toward the landfill. Waste Management representatives Lori Winters, Division Engineer and Compliance Manager, Josh McFadden, Gas Technician Supervisor, and Garret Schardt, Gas Well Technician, accompanied me during the inspection. I toured the landfill including the flare and GCCS wellheads. Tri City RDF was issued Renewable Operating Permit number MI-ROP-N6007-2012 effective on November 13, 2012. Tri City RDF is subject to NSPS Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills, and NESHAP Subpart AAAA – Municipal Solid Waste Landfills.

On-site records review included monitoring results for landfill gas collection and control system (GCCS) components, asbestos receiving and placement, and waste acceptance records. No violations of air regulations or permits were found during the inspection.

EULANDFILL: Compliant

The landfill began accepting waste in 1987. On May 25, 2012, MDEQ Resource Management Division approved a solid waste disposal area construction permit for a vertical expansion of 80.2 acres at the landfill. The expansion increases the design capacity by 7,871,600 cubic yards. The landfill is subject to NSPS WWW requirements applicable to a landfill with NMOC emission rate of greater than 50 megagrams per year and a maximum design capacity greater than 2.5 million megagrams. The last Tier II test for the landfill gas NMOC concentration occurred in 2010. The average of the NMOC sample results was 309.2 ppm, as hexane.

I reviewed the waste acceptance records. Each load is entered into a corporate maintained database. The person at the weigh station records load weight, category, generator, and transporter. The information in the database is used to generate yearly reports for the amount of waste received and number of trucks traveling on site. The facility uses the waste acceptance rates and truck numbers to calculate emissions. The records appeared adequate to make required emission estimates. Waste accepted from October 2013 through September 30, 2014 was 168, 019 yards. The waste acceptance records are used to calculate the NMOC emission values calculated using LandGem and reported to MAERS. The MAERS 2014 NMOC reported emissions were 3.24 tons.

Methane surface scans are conducted quarterly. There were no instances of a methane surface scan over 500 ppm. I reviewed records for the first through fourth quarter 2013 and 2014, and the first quarter for 2015. Surface scan monitoring is being conducted on the same days as the GCCS monitoring. The gas technician is notified if the surface scan has any high readings. Adjustments to the well field to balance gas collection rates at wells or surface repairs can be made as needed. Methane monitoring records include the required information/documentation according to 40 CFR 60.755(c).

MACT AAAA & SSM: I reviewed the sites Startup, Shutdown and Malfunction plan and annual reports for 2013 and 2014. The site had several flare malfunctions in 2013 and 2014. The flare has historically had malfunctions mainly caused by power outages. A Malfunction Abatement Plan for the flare was requested and received in 2013 due to the repeated deviations for power outage. The site is located at the end of the electrical connection, where there are very brief interruptions. A "flicker" in the electricity being received by the flare causes it to shutdown, which then has to be manually restarted. The electricity that feeds the site is three-phase at M-46 then converts to single stage down Ruth road and subsequently has to be converted back to three-phase at the flare so it can accept it. The facility has a

new single phase flare on order that they suspect will reduce the outages. In addition, the new flare will have a variable frequency drive (VFD) that will maintaining the desired frequency required by the flare. The new flare will also be able to automatically restart itself. All SSM events were responded to in manner consistent with the SSM.

The SSM plan had some revisions, an update version will be submitted to the Department.

EUACTICCOLL: Compliant

Mr. Schardt and I viewed several gas wells, TRIC0013, TRIC0012, TRIC011R, TRIC0020. All wells were within the appropriate operating ranges. The collection devices in operation that were inspected were in good condition.

GCCS monitoring records from July 2014 and February 2014 are attached. The GEM is calibrated sent to the manufacturer semi-annually for calibration and is due this April 2015. No instances of positive pressure or oxygen concentration above 5% occurred, with the exception of TRIHZ001. TRIHZ001 received a variance for oxygen up to 20 % and positive pressure on November 19, 2013 Readings for this horizontal well were within the approved variance ranges.

EUOPENFLARE: Compliant

On December 2, 2014 the blower bearings went out and the flare shut down for 70 hours. The bearings were replaced the flare placed back in service. The site had several flare malfunctions in 2013 and 2014 due to power outages. The facility has a new single phase flare on order that they suspect will reduce the outages. 40 CFR Part 60 NSPS WWW requires reporting of all flare downtime greater than one hour and periods when the gas collection system was not in operation in excess of five days. The facility reported the deviations in their Annual, Semi-annual, NSPS and SSM reports along with the corrective action taken.

The current flare has a design capacity of 2000 cfm. The flare operating information is monitored and recorded via a computer based tracking, record keeping, & alarm system. The system monitors flare temperatures and flows. An alarm is triggered for flame absence. The alarm will call an assigned employee. Flare flow and temperature records for November 2013, January 2014 and August 2014 were reviewed. All required flow and temperature information was recorded.

FGCOLDCLEANERS: Compliant

Documentation of solvent usage is maintained by Safety Kleen.

EUASBESTOS: Compliant

I reviewed asbestos records and asbestos placement tracking. The facility maintains a map and database that include the asbestos generator, volume, and placement within the landfill. The site does not receive much regulated asbestos waste. The facility received one shipment of 3 yards in 2013. All required information was recorded and available. Waste manifest records had been sent to the retention center for the shipment in 2013. The facility was reminded that if they disturb asbestos in the landfill proper notification is required per their ROP and 40 CFR Part 61 Subpart M - Asbestos NESHAP.

NAME *David R. McCam* DATE *3/31/15* SUPERVISOR *C. Dine*