

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

N121631139

FACILITY: Westside Recycling and Disposal Facility		SRN / ID: N1216
LOCATION: 14094 W. M-60, THREE RIVERS		DISTRICT: Kalamazoo
CITY: THREE RIVERS		COUNTY: SAINT JOSEPH
CONTACT: Jim Mohney , Site Manager		ACTIVITY DATE: 09/04/2015
STAFF: Matthew Deskins	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Unannounced Scheduled Inspection		
RESOLVED COMPLAINTS:		

On September 4, 2015 AQD staff (Matt Deskins and Monica Brothers) went to conduct a scheduled unannounced inspection of the Westside Recycling and Disposal Facility (WRDF) located in Three Rivers. WRDF is owned by Waste Management, Inc. and is a licensed Type II Municipal Solid Waste (MSW) landfill which is subject to the federal New Source Performance Standard (NSPS), 40 CFR 60 Subpart WWW, and the National Emission Standard for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63 Subpart AAAA for MSW landfills. Since they also accept Asbestos containing waste, they are also subject to the NESHAP 40 CFR Part 61 Subpart M for Asbestos. The purpose of the inspection was to determine compliance with the preceding federal air regulations as well as state air regulations that are contained in the facilities Renewable Operating Permit (ROP) No. MI-ROP-N1216-2011. Staff departed for the facility at approximately 9:45 a.m.

Staff arrived at WRDF at approximately 10:30 a.m. Staff proceeded to the office and went inside. Staff introduced them self to office personnel, stated the purpose of the visit, and asked if Jim Mohney or Eric Shafer was available. Jim is the Site Manager and Eric the District Manager/Engineer. She told staff that Eric was on a conference call and that Jim was out on the landfill. She radioed Jim to let him know staff was there and Jim said he would be down to the office in a few minutes. She then let staff inside the office area and led them to a conference room to wait for Jim. About 10 minutes later Jim arrived. Staff greeted Jim, introduced him to Monica, and stated the purpose of the visit. Staff then asked Jim if he wanted a copy of the DEQ "Environmental Inspection Brochure" and he said that he has a few of them already. Staff then asked about the gas well drilling that was going on. Jim said that Carlson Environmental Consultants was on site but they hadn't started drilling yet that day because their drill rig was out of fuel. Jim mentioned that he was dealing with that situation when staff arrived. Staff mentioned to Jim that we could wait in the conference room while he gets that situation squared away. He thanked staff for that and mentioned it would probably be about a half hour or so. After Jim took care of getting fuel to the drilling crew, he came back to the conference room. Prior to looking at any records required to be kept by the ROP, staff asked Jim some general questions about facility operations and about the landfill gas processing plant next door owned by DTE. Note: Eric came in and was also present for some of the conversation. According to Jim and/or Eric, Waste Management owns 13 active landfills in Michigan and they don't have any international operations outside of Canada. WRDF currently takes in between 1,000 to 1,500 tons of waste per day with the higher volume being from when they had jobs on-going such as the Enbridge Kalamazoo River clean-up. They are currently open from 7:00 a.m. until 4:30 p.m. Monday thru Friday and from 7:30 a.m. until noon on Saturday. They will stay open longer than noon on a Saturday if a holiday happened to fall on a day during the week. They still aren't recirculating any leachate because of issues they've had with wells flooding out and leachate outbreaks. Jim also explained how the DTE plant next door functions. He went on to say that WRDF is looking at signing a new contract with DTE and it will be good for another 7 years. Previously, WRDF was going to look to install their own landfill gas to energy plant when the DTE contract expired. However, due to Renewable Energy Credits, Jim said that the DTE plant is looking better from a financial standpoint so the engine plant will probably not be looked at. After these discussions it was around noon so staff mentioned they would go to lunch and then come back to take a landfill tour and to review records. Staff went to lunch and returned to the landfill at approximately 1:00 p.m.

Staff then went on a tour of the landfill with Jim. Our first stop was by the DTE Plant next door where Jim explained the various parts of the plant and their function. The DTE plant also has their own thermal oxidizer for flaring gas if needed but the open flare owned by WRDF is also located nearby in case it is needed as back-up. Our second stop was off the haul road leading up to the active area of the landfill where a landfill gas well was being drilled. We observed activities for a while and Jim explained the gas well installation process. Our third stop was near a gas well on the north hill. Jim had brought along a GEM 2000 landfill gas meter so he could show staff how landfill gas wells were sampled. A small open flare is also located between the north and middle hills. It typically operates with a gas flow of around 150 scfm but Jim said at times recently it has been as high

as 300. He said he has been looking into why it is getting a boost in scfm. We then checked out some leachate risers and control panels on our way back to the office. Once back in the conference room, Jim showed staff the file cabinet where the records were located. The following are the emissions units contained in the ROP and staffs comments regarding them.

EULANDFILL: Appears to be in COMPLIANCE

The facility has an approved active gas collection system and it is on file with the AQD district office. WRDF sells the landfill gas to another facility, Westside Gas Producers (WGP) which is owned by DTE. WGP basically scrubs the landfill gas to make it meet the specifications for pipeline quality natural gas. They have a back-up control device (open flare) that is used when the WGP is shutdown. Also, WRDF had installed another open flare under the AQD Rule 285(aa) permit exemption that came from another facility in February of 2010. This flare was installed to take care of the landfill gas generated from the 2 closed hills (designated north and middle) of the landfill. They had to do this because the landfill gas quality is declining in these areas and had been contributing to non-compliant gas being sent to WGP. As mentioned in staff's previous inspection report, because of the declining methane gas situation and certain contract language between WRDF and WGP, WGP personnel sample the gas wells at the landfill instead of an WRDF employee and/or a consultant. The two open flares at WRDF are skid mounted units and were manufactured by LFG Specialties, Inc. The flare at WGP was not operating during staff's inspection because the plant was on line but the one serving the two closed hills was.

The facility has been conducting quarterly surface emissions monitoring and it appears that the appropriate records are being kept. Staff reviewed the records for the previous four quarters of monitoring. The records reviewed included instrument calibration data, a map showing the route traversed while doing the monitoring, meteorological data, etc. Staff noted they reported numerous exceedences of 500 ppm methane but corrective actions and follow-up monitoring was done within the required time frames. Air Quality Specialists, Inc. (AQSI) does the monitoring and reporting for WRDF and they use a flame ionization detector (TVA 1000 FID) to do the monitoring. The facility has a Start-Up, Shutdown, and Malfunction (SSM) Plan on site as required. The facility has been submitting the required semi-annual and/or annual SSM reports and ROP Certifications to the district office on time. These reports have included any deviations and/or operational issues as required. The facility is maintaining an NMOC generation report that is updated annually and also has a landfill design and capacity report. The facility regularly conducts cover integrity checks and they document that it is done at least monthly. They have records of the amount of solid waste in place as well as the year by year acceptance rates.

EUACTIVCOLL: Appears to be in COMPLIANCE

The facility is conducting monthly wellhead sampling and recording the operating parameters as required. As mentioned under EULANDFILL, WGP conducts the sampling and they use a GEM 2000. Staff then reviewed several months of well data and it appears that the wells are being operated within the required NSPS parameters for oxygen, static pressure (vacuum), and temperature unless an alternate operating scenario was approved for the well by the AQD. The facility has an as-built map showing the location of the gas wells and other collection components. The facility had a binder that it keeps all the gas well logs in. These logs show location, depth, installation date, etc. of the wells. Jim said that they currently have 152 gas collectors with 145 of them being NSPS subject. The gas wells at the landfill are made out of either PVC or HDPE and they are equipped with sample ports and temperature gauges as required. The GEM 2000 is also equipped with a temperature probe for getting a temperature reading on any wells that aren't equipped with a temperature gauge. As was also previously mentioned under EULANDFILL, except for landfill gas from the north and middle hills that is now controlled by an open flare, the landfill gas is piped to WGP who then treats it to make pipeline quality natural gas. They can also divert it to the open flare when WGP isn't operating. As mentioned under EULANDFILL, the facility has been submitting the required semi-annual and/or annual SSM reports and ROP Certifications to the district office on time.

EUASBESTOS: Appears to be in COMPLIANCE

The facility has warning signs, fencing, and/or natural features surrounding the property which should adequately deter access by the general public as required. The facility is keeping all the required records pertaining to asbestos which include the shipping records (waste manifests) of the generator, transporter, and quantity of asbestos accepted. The facility also is maintaining a map that shows the depth and location of the

buried asbestos as required. This information is being kept on a continual basis and Jim said that he updates the map annually. The facility is submitting semi-annual and/or ROP certifications as required.

FGOPENFLARES: Appears to be in COMPLIANCE

As mentioned previously, one open flare is used as a back-up control device should the WGP facility shut down and the other controls the landfill gas generated from the north and middle hills. The facility has on site the data from the original performance testing that was conducted on the flares and also the vendor information. Both of the open flares are equipped with heat sensing devices (UV flame detector) and thermocouples that monitor for the continuous presence of a flame. If the UV sensor doesn't indicate the presence of a flame, the flares will shut down automatically and a pneumatically operated valve will close so that landfill gas cannot be emitted directly to the atmosphere. As mentioned under EULANDFILL, the facility has been submitting the required semi-annual and/or annual SSM reports and ROP Certifications to the district office on time.

FGCOLDCLEANERS: Appears to be in COMPLIANCE

The facility only has one parts cleaner now and it is located in the hauling companies maintenance garage. The unit was manufactured by Crystal Clean and the cleaner/degreaser used is called Mirachem. The detergent is mixed/diluted with water and according to the MSDS it contains no HAPs and contains very little VOC even if used undiluted (See Attached). The facility is submitting semi-annual and/or ROP certifications as required.

FGRULE290: COMPLIANCE

The facility currently doesn't have any emission units that fall under the Rule 290 permit exemption regulation

INSPECTION CONCLUSION:

At the present time, the facility appears to be in COMPLIANCE with both federal and state air regulations that are contained in ROP No. MI-ROP-N1216-2011. Staff thanked Jim and Eric for their time and departed the facility at approximately 4:50 p.m.

NAME Mitt Dah

DATE 9-15-15

SUPERVISOR MA 9/15/2015