

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

N289652885

FACILITY: C&C Expanded Sanitary Landfill		SRN / ID: N2896
LOCATION: 14800 P Drive North, MARSHALL		DISTRICT: Kalamazoo
CITY: MARSHALL		COUNTY: CALHOUN
CONTACT: Stephanie Goodman , Environmental Manager		ACTIVITY DATE: 03/11/2020
STAFF: Matthew Deskins	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Unannounced Scheduled Inspection		
RESOLVED COMPLAINTS:		

On March 11, 2020 AQD staff (Matt Deskins) went to conduct a scheduled unannounced inspection of C & C Landfill located in Marshall, Calhoun County. C & C Landfill is a licensed Type II municipal solid waste (MSW) landfill that is owned by Republic Services and is currently subject to the federal New Source Performance Standard (NSPS), 40 CFR Part 60, Subpart WWW (NSPS for MSW Landfills), and the National Emission Standard for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63, Subpart AAAAA (MACT for MSW Landfills). The facility is also now subject to 40 CFR Part 60 Part XXX (NSPS for MSW Landfills) which will eventually replace the NSPS WWW. The applicability of the new regulation is dependent upon the most recent construction permit that increases the landfill's design capacity. EGLE's Materials Management Division (MMD) is responsible for issuing these permits and if one was issued to the landfill on or after July 17, 2014, they are considered a new source and the new regulation applies. C&C Landfill had one of these permits issued to them by MMD on April 16, 2018. Once the regulation became applicable, the next timeline for when the regulation actually takes affect is when the landfill commences construction of the vertical or lateral expansions approved by the construction permit. In this case, C&C Landfill commenced construction on March 15, 2019 and since that time the facility has submitted the initial design capacity and NMOC reports on time (Submittals dated June 12, 2019). The Gas Collection and Control Systems (GCCS) design plan is due one year after the first NMOC emission rate report indicates emissions are equal to or greater than 34 Mg (was 50 Mg under the NSPS WWW), so the GCCS plan should be submitted by June 12, 2020. The GCCS will then have to be installed and operated in compliance with the Subpart XXX requirements 18 months after that which would be December 12, 2021. The purpose of the inspection was to determine the landfill's compliance with the preceding federal air regulations as well as state air regulations that are contained within the facilities Renewable Operating Permit (ROP) No. MI-ROP-N2896-2017. The ROP at one time had been a sectioned permit with C&C Energy (f.k.a. Gas Recovery Systems (GRS)) which is owned by Fortistar as section 2. In 2011/2012, both the landfill and C&C Energy requested that they be issued separate ROPs which the AQD has allowed at other facilities. The AQD approved the request and C&C Energy was later issued the SRN (P0222); however, they are still considered one stationary source with the landfill for all other purposes. Staff departed for the facility at approximately 9:45 a.m.

AQD staff arrived at the C & C Landfill at approximately 10:35 a.m. Staff first circled the perimeter roads of the landfill to see if any odors could be detected and none were noted. Staff then proceeded to the landfill entrance where staff introduced them self to the scale operator and stated the purpose of the visit. Staff was then allowed into the office area where they were then introduced to Amy (another scale operator) who was in a conference room. Staff introduced them self and asked Amy if Marguerite Davenport (Operations Manager) was available. Marguerite had taken over for Glen Goestenkors a few years ago when staff had conducted their previous inspection. Amy said that Marguerite left in December of 2019 and is no longer with Republic Services. She then led staff to another office where they were introduced to Michael Krutsinger. Staff introduced them self to Michael and stated the purpose of the visit. Michael mentioned that he isn't familiar with the landfill's records but said him and Amy would do their best to assist staff. Michael mentioned that he was the Site Manager for a landfill in Ohio and was just filling in at C&C as a rotating site manager (filling in on a weekly basis) until the position is filled permanently starting in April. He said that the person who will be taking over at that time will be Tami Craig who was currently at one of their landfill's in Fort Wayne, IN. Staff said that was fine and that in the past staff been allowed to review records in facility files located in one of the offices. Staff mentioned that they had also been assisted by Stephanie Goodman (Environmental Manager) in getting all items needed to complete the inspection. Michael said that was great and that he would contact her because he wasn't sure where everything would be located. Michael then contacted Stephanie and informed her that staff was there for an inspection. Michael then handed the phone to staff where staff proceeded to explain to Stephanie what they would like to see record wise (Monthly Wellfield Data, Quarterly Surface Emissions Data, Asbestos Manifests and Disposal Locations, Open

Flare Combustion Data, etc.). Stephanie mentioned that all records are pretty much electronic now, except the asbestos items, and that they typically store the information on flash drives which is then given to the facility for their files. She said that since Marguerite left, things might not be where they should be so she said she would e-mail Michael everything staff wanted to see. She then asked if staff could get started with the asbestos records while she compiled everything to send to Michael, which staff replied that they would. Also, while staff had Stephanie on the phone, they confirmed with her the applicability dates and timelines of the NSPS XXX.

The following lists the emission units contained in the ROP along with current pertinent information that staff reviewed. A lot of the conditions contained in the ROP are requirements that have already been completed and/or are future requirements for when the landfill is closed. Staff also asked Michael some general questions and those will be included as well.

As mentioned in the opening paragraph, C & C Landfill's ROP does not contain two sections currently and the following emission units and/or flexible groups are contained in it: EULANDFILL, EUACTIVECOLL, EUASBESTOS, EUFLARE1, EUCOLDCLEANERS, and EURULE290. The landfill at one time had two enclosed flares that used to make up a flexible group known as FGENCLOSEDFLARES but they were removed. They replaced those two units back in 2013 with an open flare (Manufactured by Zink and rated for 3,000 scfm) and incorporated that unit into their ROP and removed the enclosed flare portion.

EULANDFILL: Appears to be in COMPLIANCE

According to Michael, C & C Landfill is taking in around 1500 to 2000 tons of waste a day with the variations dependent upon whether it's summer or winter. They are required to keep annual reports of the amount of waste in place which gets submitted annually to the EGLE's Materials Management Division (MMD). They also have approval from MMD to re-circulate up to 12,000 gallons of leachate per day. Staff had been told during the last inspection that they stopped recirculating leachate at the landfill in 2017 due to a new company policy. Michael confirmed that was still the case/policy. The facility has an Odor Management Plan (OMP) as required and it is implemented should any odiferous wastes be brought in. This plan had to be developed years ago due to odor issues from the disposal of wastewater treatment plant sludge. The site is still taking in sludge that comes from the City of Battle Creek and the City of Kalamazoo. Michael said that company policy is to only dispose of 20 gallons of wet waste per ton of MSW, so they sometimes divert the sludge to Ottawa County Farms to stay under this amount. Michael also confirmed that the sludge still comes in during the months of November through March (winter months) when they have to stop land applying it. The AQD hasn't received any complaints of odors pertaining to any waste, landfill gas, or sludge type smells in a number of years.

The facility has an approved active gas collection system as well as associated control system (EUFLARE1) that the gas is routed to as required. Currently, the landfill gas produced is piped to C&C Energy where it is combusted in their internal combustion engines and turbine for electrical generation. The open flare is mainly used for back-up purposes should the engine(s) and/or turbine go down. They also use to run it to keep a consistent vacuum on the well field which they haven't had to do anymore. Their target is to have around 55-60 inches of H2O vacuum pressure on the wellfield according to Stephanie.

Staff then inquired about well field and surface emissions monitoring and Stephanie said that SCS Field Services (SCS) is still contracted to do those. Staff reviewed 12 months (January 2019 through December 2019) of wellfield data. The facility has the recent monthly data for January and February of 2020 but it hasn't been downloaded and compiled yet since Marguerite had left (?). Staff noted that the well monitoring is meeting the NSPS monitoring requirements or they have asked for approval to have alternate compliance timelines or alternate operating scenarios. Quarterly surface emissions monitoring is being conducted and the facility appears to be keeping the appropriate records as required. Staff reviewed records for the past four quarters of data. The records staff reviewed included instrument calibration data, weather data, and a map showing the route traversed while doing the monitoring. SCS uses a portable analyzer (either a Landtec SEM-5000 or an Inficon Irwin Methane Leak Detector) for their surface emissions monitoring. Staff noted that exceedences (over 500 ppm CH₄) were reported for the 2nd (9 reported), 3rd (1 reported), and 4th (4 reported) quarters of 2019. The facility conducted corrective actions in these areas and the required follow-up re-monitoring indicated compliance. Staff noted that no exceedences were documented for the 1st quarter of 2020. SCS is also conducting the monthly cover

integrity checks as part of their monthly well field sampling routine. The facility has a Startup, Shutdown, and Malfunction Plan (SSM) as required. The facility has also been submitting the required semi-annual/annual ROP Certifications and SSM reports to the district office on time.

EUACTIVECOLL: Appears to be in COMPLIANCE

The facility has an up to date ASBUILT drawing showing the existing collection system and proposed expansion areas that they submitted to the AQD and MMD. It appears that the collection system is constructed of appropriate materials (HDPE and/or PVC is used). Currently, the facility has 184 NSPS subject gas wells (vertical and horizontal wells). They also have leachate risers and cleanouts that are hooked up to the GCCS as well. Some of gas wells are combo wells (wells with liquid pumps) and they are equipped with Landtec wellheads. The facility keeps well logs of any newly drilled wells. As mentioned previously, SCS is conducting the monthly wellhead monitoring for the landfill and they use a Landtec GEM 5000 gas analyzer and are recording static pressure (vacuum), oxygen, and temperature as required. If any of these parameters exceed operational standards during monitoring, the timeframe for corrective actions appears to be being adhered to. If corrective actions do not bring a well back into compliance, the facility has requested alternate compliance timelines and/or operating scenarios as required. Staff reviewed 12 months of monthly data as mentioned under EULANDFILL above and did not note any issues. The facility has been submitting the required semi-annual and annual ROP Certification Reports and SSM Reports on time.

EUASBESTOS: Appears to be in COMPLIANCE

The facility has a perimeter fence surrounding the entire property which should adequately deter access by the general public as required. The facility appears to be keeping all the required records which include: shipping records (manifests) of the generator, transporter, and quantity of asbestos accepted; and monthly disposal maps showing the depth and location of all buried asbestos, etc. Staff reviewed several months of manifests and compared them to their monthly asbestos disposal maps and did not note any issues. Also, only friable asbestos has to be tracked.

EUFLARE1: Appears to be in COMPLIANCE

As mentioned previously, the flare is manufactured by Zink and rated at 3,000 scfm. It was installed back in 2013 and it replaced the two enclosed flares and is used mainly as a back-up device to the engines and turbine at C&C Energy. Staff did not observe any visible emissions since the flare was not operating during the inspection due to all the gas being directed to the C&C Energy facility. It was tested after it was installed and the net heating value and other requirements were met. It is equipped with a heat sensor to detect flame presence and a digital data recorder (Yokogawa) that records flow, temperature, and vacuum every 2 minutes. The information is downloaded from the Yokogawa twice a month and they also have a cloud based on-line application called Fleet Zoom where they also track it. The flare is also equipped with a pneumatic valve that automatically closes if the whole system (engines, turbine, and flare) should shut down to prevent landfill gas from venting uncontrolled to the atmosphere. The facility appears to be keeping the appropriate records and submitting the appropriate reports as they pertain to the open flare.

EURULE290: Appears to be in COMPLIANCE

As has been mentioned in previous inspection reports, the groundwater treatment system (Air Stripper) on site is what was being operated under this exemption and it has not been in use since March of 2004 under an approval from the MMD. Stephanie confirmed that was still the case. The treatment system was originally put in place as a requirement of an MMD Remedial Action Plan to address groundwater contamination. Over the years contaminant levels have hardly been detected in the groundwater, so MMD has allowed the facility to just monitor the situation. Stephanie said that they will probably dismantle the unit this year.

FGCOLDCLEANERS: Appears to be in COMPLIANCE

The parts cleaner is located in the maintenance garage. It is a Crystal Clean Aqueous Solution heated unit. The aqueous cleaning agent used in it is water based and the VOC concentration in it is miniscule and well under the percentage of VOC required to meet the definition of a cold cleaner.

Staff then took a ride with Michael around the perimeter road of the landfill and then on top to the disposal area to check things out. Once back at the office, staff thanked Michael for his time and departed the facility at approximately 1:25 p.m.

INSPECTION CONCLUSION: The facility appears to be in **COMPLIANCE** with the terms and conditions of MI-ROP-N2896-2017 as well as the NSPS XXX at the present time.

NAME Matt Derkin

DATE 3-23-20

SUPERVISOR RIL 3/30/20