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

N543243329

FACILITY: Southeast Berrien County Landfill Authority		**SRN / ID:** N5432
LOCATION: 3200 Chamberlain Rd., BUCHANAN		**DISTRICT:** Kalamazoo
CITY: BUCHANAN		**COUNTY:** BERRIEN
CONTACT: Tyler Ganus , Environmental Coordinator - SEBCL		**ACTIVITY DATE:** 02/13/2018
STAFF: Matthew Deskins	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Unannounced Scheduled Inspection		
RESOLVED COMPLAINTS:		

Southeast Berrien County Landfill - FY 2018 Inspection

On February 13, 2018 AQD staff (Matt Deskins and Cody Yazzie) went to conduct a scheduled unannounced inspection of the Southeastern Berrien County Landfill (SEBCL) located in Buchanan, Berrien County. SEBCL is a licensed Type II municipal solid waste landfill and is currently subject to the federal New Source Performance Standard (NSPS), 40 CFR Part 60 Subpart WWW, and the National Emission Standard for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63 Subpart AAAA. These and other applicable requirements are contained in SEBCL's Renewable Operating Permit (ROP) No. MI-ROP-N5432-2016.

NOTE 1: New federal NSPS regulations were promulgated by the EPA that pertain to solid waste landfills (Subparts XXX and Cf) and which one is applicable to a landfill is determined by the issuance date of the most recent solid waste construction permit. Presently, SEBCL would be subject to Subpart Cf due to the issuance date of their construction permit. However, the state has to submit a State Implementation Plan (SIP) to the EPA for review and approval in order for the AQD to administer/enforce Subpart Cf. Until a state SIP is approved, SEBCL has to continue to comply with Subpart WWW.

Back in 2008, SEBCL signed an agreement to lease a portion of their property to North American Natural Resources (NANR) for the construction of a landfill gas to energy facility. NANR was issued a permit (PTI No. 296-08) at that time for four stationary reciprocating internal combustion engines (RICE) and this permit/facility is incorporated as Section 2 in the SEBCL's ROP. The engines are also subject to 40 CFR Part 60 Subpart JJJJ.

NOTE 2: Fairly recently it was found out that the combustion of landfill gas in internal combustion engines produces formaldehyde as a by-product. Staff of the AQD were then asked to request an updated PTE from all of their landfills that combust landfill gas with ICEs taking into account with this new information. The updated PTE submitted regarding NANR's engines indicated that they would be major for formaldehyde emissions and thus a major source of HAPs. This would ultimately mean they would be subject to 40 CFR Part 63 Subpart ZZZZ (RICE MACT) and would also affect the height of their stacks. Since this new information would impact a lot of previously permitted engines at a lot of landfills across the state, upper management made the following decision in regards to how the AQD would proceed with things:

"If a landfill gas to energy facility had internal combustion engines permitted prior to the HAPs issue (Formaldehyde) becoming known and are now major for HAPs, the AQD was not going to pursue any action against them nor re-open any permits. We were only going to recommend that they raise their current stack heights and we would treat them as a major source of HAPs for any future regulations/modifications/etc. moving forward. However, if the facility submits a PTI to modify anything for the previously permitted equipment, the AQD would then address any HAP requirements at that time and include them in their revised permit."

The purpose of the inspection was to determine both SEBCL and NANR's compliance with the preceding applicable air regulations and their respective sections of the ROP. Staff departed for the facility at approximately 9:15 a.m. Staff decided to conduct the inspection of NANR first because during a recent inspection, no one ended up being at the plant in the afternoon and staff had to return again at a later date to finish the inspection.

Section 2 - North American Natural Resources

As just mentioned, staff decided to inspect NANR first to hopefully ensure that a plant operator would be present. Staff arrived at the facility at approximately 10:45 a.m. Staff noted that there were two vehicles present

outside and staff proceeded into the office area. Staff introduced them self and stated the purpose of the visit. Staff met with Brandon and Ryan of NANR and staff gave Brandon their business card. Brandon mentioned that Victor Sokolowski, who use to oversee things at the plant, left to take a new job so he now oversees the operations at several of NANR's facilities including SEBCL, Autumn Hills, and the new plant they are constructing at Pearson. Ryan is now the plant operator at their SEBCL facility. Staff then started asking Brandon some general questions about their operations. The following is a summary of those discussions followed by their ROP requirements and their compliance status with them.

According to Brandon, the NANR facility located at SEBCL was permitted and constructed for four Caterpillar 3520 internal combustion engines. At the present time, only three of the four engines have been installed and they are now operating all of them 24/7 but at around 75% load. There used to be only enough landfill gas to run two of them at full load and the third engine was used as a back-up/swing engine for when they had to maintenance on one. Brandon said that the landfill has done a lot of work on their wellfield which has really helped with the amount of gas being sent to the plant. Brandon went on to mention that they also have two Caterpillar 3516 engines at the plant but they are just being stored there and are not hooked up.

He said that the plants current electrical output is averaging around 3.6 MW with each engine putting out 1.2 MW. Each engine at full load is rated at 1.6 MW. Engine #1 has a serial number of GZJ00391 and currently has 60,371 hours on it, Engine #2 has a serial number of GZJ00392 and currently has 54,240 hours on it, and Engine #3 has a serial number of GZJ00393 and currently has 56,021 hours on it. Staff then asked about landfill gas flow to the plant and Brandon said that they usually have around 50 inches of vacuum on the wellfield with a current flow of around 1230 scfm being combusted by the engines. The vacuum was currently at -53 inches and he said that the landfill requests a maximum of -55 inches be applied. He said the methane (CH4) quality of the landfill gas has been ranging around 50% to 55%. Staff noted that the CH4 was currently at 54.3% and O2 was at 0%. Staff then looked over their ROP requirements and they are as follows.

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUENGINE1-S2	Caterpillar 3520 landfill gas engine.	7-17-2009	FGENGINES-S2
EUENGINE2-S2	Caterpillar 3520 landfill gas engine.	7-17-2009	FGENGINES-S2
EUENGINE3-S2	Caterpillar 3520 landfill gas engine.	7-17-2009	FGENGINES-S2
EUTREATMENTSYS-S2	This emission unit treats landfill gas before its subsequent use or sale. The treatment system removes particulate to at least the 10 micron level, compresses the landfill gas, and removes enough moisture to ensure good combustion of gas for subsequent use; therefore, guaranteeing that the intent of the destruction of the NMOC will be maintained.	5-9-2011	NA

EUTREATMENTSYS-S2
EMISSION UNIT CONDITIONS

DESCRIPTION

This emission unit treats landfill gas before its subsequent use or sale. The treatment system removes particulate to at least the 10 micron level, compresses the landfill gas, and removes enough moisture to ensure good combustion of gas for subsequent use; therefore, guaranteeing that the intent of the destruction of the NMOC will be maintained.

POLLUTION CONTROL EQUIPMENT

Any emissions from any atmospheric vents or stacks associated with the treatments system shall be subject to §60.752(b)(2)(iii)(A) or (B).

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate the treatment system at all times when the collected gas is routed to the treatment system. (40 CFR 60.753(f))

AQD Comment: Appears to be in COMPLIANCE. Staff was told that the facility operates the system whenever landfill gas is routed to it and it was in operation during the inspection.

2. The permittee shall operate the treatment system so that any emissions from any atmospheric vents or stacks associated with the treatment system shall be subject to §60.752(b)(2)(iii)(A) or (B). (40 CFR 60.752(b)(2)(iii)(C), 40 CFR 63.1955(a))

AQD Comment: Appears to be in COMPLIANCE. There are no stacks or vents associated with the treatment system.

3. The permittee shall operate the treatment system to comply with the provisions of 60.753(e) and (f), and 60.756(d). (40 CFR 60.752(b)(2)(iv), 40 CFR 63.1955(a))

AQD Comment: Appears to be in COMPLIANCE. The system appears to comply with the requirements of Part 60 Subpart WWW.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The treatment system shall be designed as approved by AQD. (40 CFR 60.752(b)(2)(iii)(C), 40 CFR 60.752(b)(2)(i)(D), 40 CFR 63.1955(a))

AQD Comment: Appears to be in COMPLIANCE. The AQD uses the EPA guidance on the design of the system which it appears to meet.

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))

1. The permittee shall keep up-to-date, readily accessible records of all control or treatment system exceedances of the operational standards in §60.753(e) and (f). (40 CFR 60.758(e), 40 CFR 63.1955(a))

AQD Comment: Appears to be in COMPLIANCE. There have been no exceedences to date with the system to staff's knowledge.

2. The permittee shall keep records of all preventative maintenance performed in accordance with the preventative maintenance plan (PMP) prepared pursuant to condition IX.3. of this permit. (40 CFR 60.756(d), R 336.1213(3))

AQD Comment: Appears to be in COMPLIANCE. The facility has a PMP and documents any maintenance or repairs. Maintenance usually consists of greasing things every 6 months and flushing the radiator on the chiller once a year.

3. The permittee shall provide information to the AQD as provided in 40 CFR 60.752(b)(2)(i)(B) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The AQD shall review the information and either approve it, or request that additional information be submitted. The AQD may specify additional appropriate monitoring procedures. (40 CFR 60.756(d)).

AQD Comment: Appears to be in COMPLIANCE. The facility operates the treatment system following EPA guidance for a treatment system.

VII. REPORTING

AQD Comment: Items 1 through 5 below appear to be in COMPLIANCE. The facility is and/or has submitted the below reports.

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. Report shall be postmarked or received by appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. Report shall be postmarked or received by appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

4. A description of the operation of the treatment system, the operating parameters that indicate proper performance, and the appropriate monitoring procedures shall be submitted the appropriate AQD District Office for review within 30 days after the issuance of this permit. (40 CFR 60.752(b)(2)(i)(B), 40 CFR 63.1955 (a))

5. The permittee shall submit to the appropriate AQD District Office semiannual reports for the landfill gas treatment system. The report shall be received by appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (40 CFR 60.757 (f), 40 CFR 63.1980(a), 40 CFR 63.1955(a))

   The report shall include:
   a. Value and length of time for exceedance of applicable parameters monitored under §60.756(d). (R 336.1213(3), 40 CFR 60.757(f)(1), 40 CFR 63.1980(a), 40 CFR 63.1955(a))
   b. Description and duration of all periods when the gas stream is diverted from the treatment system through a bypass line or the indication of bypass flow. (R 336.1213(3))
   c. Description and duration of all periods when the treatment system was not operating for a period exceeding 1 hour and length of time the control device was not operating. (40 CFR 60.757(f)(3), 40 CFR 63.1980(a), 40 CFR 63.1955(a))
   d. Description and duration of all periods when the treatment system was not operated in accordance with the operating parameters and monitoring procedures that were part of the plan in condition number VII.4. (R 336.1213(3))

6. The permittee shall submit the startup, shutdown, and malfunction (SSM) report to the appropriate AQD District Office and it shall be delivered or postmarked by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (40 CFR 63.10(a)(5), 40 CFR 63.10(d)(5))

AQD Comment: Appears to be in COMPLIANCE. They have been submitting the SSM Report.

IX. OTHER REQUIREMENT(S)

1. The provisions of 40 CFR, Part 60, Subpart WWW apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 1 hour for the treatment system. (40 CFR 60.755(e), 40 CFR 63.1955(a))

AQD Comment: Appears to be in COMPLIANCE.

2. The permittee shall have developed and implemented a written SSM plan according to the provision in 40 CFR 63.6(e)(3) for EUTREATMENTSYS-S2. A copy of the SSM plan shall be maintained on site. (40 CFR 63.1960, (40 CFR 63.1965(c))

AQD Comment: Appears to be in COMPLIANCE. The facility has an SSM Plan on site that was developed according to the NESHAP.

3. The permittee shall have implemented a written preventative maintenance plan (PMP) for EUTREATMENTSYS. At a minimum, the plan shall include a schedule of maintenance activities consistent with manufacturer's recommendations, and the operating variables that will be monitored to detect a malfunction or failure. A copy of the PMP shall be maintained on site and available upon request. (40 CFR 60.756(d), R 336.1213(3), R 336.1911)

AQD Comment: Appears to be in COMPLIANCE. The facility has a PMP and it was also submitted to the AQD.

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGENGINES-S2	Landfill gas engines operated by North American Natural Resources SBL-LLC	EUENGINE1-S2 EUENGINE2-S2 EUENGINE3-S2

FGENGINES-S2
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Landfill gas engines operated by North American Natural Resources SBL-LLC. (A fourth engine was permitted, but at the time of this ROP being issued, the engine has not been installed.)

Emission Unit: EUENGINE1-S2, EUENGINE2-S2, EUENGINE3-S2

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	0.62g/HP*Hr^2	hourly	FGENGINES-S2	SC V 1	40 CFR 52.21(c) and (d)
2. CO	2.8g/HP*Hr^2	hourly	FGENGINES-S2	SC V 1	40 CFR 52.21(c) and (d)
3. VOC	1.0g/HP*Hr^2	hourly	FGENGINES-S2	SC V 1	40 CFR 60.4233

AQD Comment: Appears to be in COMPLIANCE. The engines have been tested annually and they have met the above emission limits to date.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR, Part 60, Subparts A and JJJJ, as they apply to FGENGINES-S2.[2] (40 CFR, Part 60, Subparts A & JJJJ)

AQD Comment: Appears to be in COMPLIANCE.

2. The permittee shall not operate FGENGINES-S2 unless the engines are operated in a manner consistent with good air pollution control practices for minimizing emissions.[2] (40 CFR, Part 60, Subparts A & JJJJ(60.4243 (b)(2)(ii))

AQD Comment: Appears to be in COMPLIANCE. The facility appears to be operating and maintaining the engines to minimize emissions.

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall verify and quantify criteria pollutant emission rates from FGENGINES-S2 by testing at owner's expense, in accordance with Department requirements. (The initial testing was performed on March 9, 2010.) The permittee must conduct performance testing every 8,760 hours or 3 years after the initial test, whichever comes first. No less than 60 days prior to any testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.[2] (40 CFR, Part 60, Subparts A & JJJJ (40 CFR 60.4243(b)(2)(ii) and 60.4244))

AQD Comment: Appears to be in COMPLIANCE. The facility is now testing the engines in the required timeframes. This had been an issue after the plant was first constructed.

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall monitor emissions and operating information for FGENGINES-S2 in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR, Part 60, Subparts A and JJJJ. The permittee shall keep records of all source emissions data and operating information on file at the facility and make them available upon request.[2] (40 CFR, Part 60, Subparts A & JJJJ (40 CFR 60.4245))

AQD Comment: Appears to be in COMPLIANCE. This condition basically states that the facility must maintain information on the owner/operator, address of affected source, engine information, emission control equipment, maintenance records, etc. The facility has this on-site and it was also included as part of their permit application.

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))

AQD Comment: Appears to be in COMPLIANCE.

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))

AQD Comment: Appears to be in COMPLIANCE. They are submitting the semi-annual reports on time.

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

AQD Comment: Appears to be in COMPLIANCE. They are submitting the annual reports on time.

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. FGENGINES-S2	16.1[2]	25[2]	40 CFR 52.21(c) & (d)

AQD Comment: Appears to be in COMPLIANCE. The stacks appear to meet the height and dimension requirements.

IX. OTHER REQUIREMENT(S)

1. Within 30 calendar days of the date of permit approval, the permittee shall develop an approvable operation and maintenance plan. The plan shall be kept on site and shall contain the following information as required by 40 CFR 60.4243(b)(2)(ii)[2]:
   - a maintenance plan
   - records of conducted maintenance (40 CFR, Part 60, Subparts A & JJJJ(60.4243(b)(2)(ii))

AQD Comment: Appears to be in COMPLIANCE. The facility submitted an OM&M Plan and they are keeping records of conducted maintenance.

2. The permittee shall comply with the applicable requirements of 40 CFR, Part 60, Subparts A & JJJJ. (40 CFR, Part 60, Subparts A & JJJJ)

AQD Comment: Appears to be in COMPLIANCE. They appear to be complying with Subparts A and JJJJ.

After looking over the ROP requirements, staff went on a tour of the plant with Brandon and Ryan. Staff looked at all three 3520 engines and confirmed the serial numbers as well as the hours of operation on the engines (were on a computer). Staff also noted the two 3516 engines that Brandon mentioned were being stored at the location. Brandon then showed staff the switch gear and the other equipment pertaining to transmitting electricity out to the substation owned by AEP. After looking everything over, staff proceed back to the office where they thanked Brandon and Ryan for their time. Staff then mentioned to Ryan that they were going to show Cody the flare skid and other equipment located adjacent to the plant prior to leaving. Staff then proceeded over to the flare skid where staff explained some various equipment to Cody. Staff also explained what equipment was needed to meet the definition of a "treatment system" for the landfill gas prior to combustion in the engines. Staff then proceeded go to lunch prior to inspecting the landfill portion of the ROP.

NANR INSPECTION CONCLUSION: The facility appears to be in COMPLIANCE with Section 2 of MI-ROP-N5432-2016 and with the requirements of the NSPS JJJJ at the present time. Staff departed the facility at approximately 12:10 p.m.

Section 1 - Southeast Berrien County Landfill

Staff arrived at the SEBCL at approximately 1:00 p.m. after the NANR inspection and having lunch. Earlier and prior to the NANR inspection, staff had driven around the perimeter roads of the landfill to see if any odors could be detected. Winds had been out of the E/SE and staff did notice some slight landfill waste odors that staff would consider a 1 on the AQD odor scale right before you reached the office entrance on Chamberlain Road. Staff then proceeded to the office area but there was no one present. Staff then went out to the maintenance garage where they were able to locate someone. Staff ended up talking with Travis and he mentioned that Tyler Ganus (who is currently the General Manager as well as the Environmental Compliance Manager) was on vacation and wouldn't be back until Thursday. Travis then mentioned that Josh could assist

staff and he contacted him. Josh samples the wellfield amongst other things and he said he would be up shortly. Staff then proceeded with Travis back over to the office area. Josh came in a few minutes later and staff introduced them self to him. Staff then mentioned that the inspection would entail looking over the records/requirements of the various emission units contained in the ROP.

Staff then asked Josh and/or Travis some general questions before taking time to review records and go on a short tour of the landfill. According to Travis, SEBCL takes in on average 800 tons of waste per day. The landfill still operates Monday through Friday from 7 a.m. until 5 p.m. and from 8 a.m. until noon on Saturdays. The landfill also includes a Recycling Center next door to the landfill office that's intended to be used by residents of area municipalities. Staff then asked Travis if they do any leachate recirculation to which he said they did not. He said that all leachate goes to the POTW whether by truck or their sewer discharge. Travis said that they just started construction on building an SBR (?) leachate treatment system. Travis then excused himself to go do other things. Staff then asked Josh some questions about the wellfield, groundwater treatment system, the open flare, etc., and those things will be mentioned under the respective emission unit of the ROP that are to follow. Josh ended up having to contact Tyler to find out where their records were located because everything is kept electronically now. Tyler ended up getting on his laptop remotely from home which allowed him to show staff were all the pertinent records were located so that they could be looked at. The following is a summary of the facilities emission groups, flexible groups, the inspection staff conducted, and the facilities compliance status.
EULANDFILL: Appears to be in COMPLIANCE

As mentioned previously, SEBCL is currently taking in, on average, 800 tons of waste per day. They are keeping track of the waste acceptance rates and that is also a requirement of Part 115 that the OWMRP administers. As mentioned previously, they do not re-circulate any leachate and it all ends up going to the POTW in Buchanan after it has gone through a nitrification treatment process due to having excessive ammonia in it. The facility has an approved active gas collection system and control device (Open Flare). The flare is used as a back-up control device should NANR's engines go down. The landfill has been conducting quarterly surface emissions monitoring and they appear to be keeping the appropriate records as required. Josh conducts the surface emissions monitoring with a Landtec SEM 500. Staff reviewed all the records for 2017 (4 quarters) which included instrument calibration data, the route traversed while conducting the monitoring, and if any exceedences were documented. They did have an exceedance in the 3rd quarter but after conducting corrective actions, the 10 day and 30 day re-checks indicated compliance. They are conducting cover integrity checks once a month as required and they typically conduct these either during the monthly well monitoring or when doing the quarterly surface emissions monitoring. The facility has a Startup, Shutdown, and Malfunction (SSM) Plan on site as required and has been submitting the required semi-annual ROP Certification Reports and SSM Reports to the district office on time.

EUACTIVECOLL: Appears to be in COMPLIANCE

The facility has an approved active gas collection system as required and the materials used in the gas collection system appear to be either HDPE or PVC which meets requirements. The header pipe and lateral lines are HDPE and the well casings are PVC schedule 80. The facility keeps an ASBUILT drawing showing the existing collection system and proposed expansion areas. The facility currently has 98 gas wells, including horizontals, and the monthly monitoring is done using an Elkins Envision gas analyzer. The wells are all equipped with either Landtech, QED, or Elkins wellheads. Josh does the wellfield monitoring and they are recording static pressure (vacuum), oxygen, and temperature as required. Staff reviewed the previous six months of data and the facility has also been taking corrective action in the required time frames or has asked for alternate compliance timelines and/or alternate operating scenarios for any monitoring parameters that exceed NSPS limits. The facility usually submits the required semi-annual ROP Certification Reports and SSM Reports to the district office.

EUOPENFLARE: Appears to be in COMPLIANCE

The facility has an open flare that is used for back-up purposes should the NANR facility shut down. The flare is a skid mounted unit and the manufacturer is Calidus with a flow rating capacity of 200 to 2000 scfm. The control panel of the flare has been retrofitted with John Zink instrumentation. The open flare is equipped with a Yokogawa electronic data logger that records flow and temperature. The information gets downloaded weekly to their computer if it has been operating. The flare is also equipped with a thermocouple to monitor the continuous presence of a flame. The flare is not equipped with any type of bypass and should the flare shut down while in use, a pneumatic valve (operated by a nitrogen tank) automatically closes preventing emissions

from venting to the atmosphere. They have two blowers now that act as the vacuum source on the wellfield with one being a back-up unit as well as allowing the landfill to alternate operations between the two.

ASBESTOS: Although the facility stopped accepting this type of waste back in 2000 to satisfy a WHMD violation, the asbestos requirements still need to be included in the ROP since they had at one time accepted asbestos. They have been submitting notifications as required and the facility has warning signs, fencing, and/or natural features surrounding the property which should adequately deter access by the general public.

FGRULE290: Appears to be in COMPLIANCE

The facility currently only operates the groundwater treatment system under this permit exemption rule and haven't installed anything new using it. The groundwater treatment system is a tray type air stripper the facility installed quite a few years ago. The system is still operating around the clock and consists of 30 pumping wells. The groundwater is pumped into the treatment building where it enters the top tray and continues to drop down through a number of trays as air is blown up through it from below. This treatment process tends to lower the pH and the landfill has to adjust the pH back to 7.4 to 7.5 using sulfuric acid to meet NPDES discharge requirements to the creek nearby. The facility is conducting monthly sampling of the influent and effluent for the appropriate contaminants that are required by their NPDES permit and ROP for their groundwater treatment system. The only contaminant detected appears to be 1,2 dichloroethylene which is a by product of the degradation of ether. It is considered a carcinogen with an IRSL greater than 0.04 ug/m3 which would require the controlled emissions to be less than 10 pounds per month. Records reviewed for the 2017 calendar year indicated emissions at 5.4086 pounds for the entire year (See Attached Spreadsheet).

FGCOLDCLEANERS: Appears to be in COMPLIANCE

The coldcleaner is located on in their maintenance garage and is not a heated unit. Staff has reviewed the MSDS sheet on previous occasions and it didn't indicate that the solvent contained any of the listed halogenated compounds that were over 5 percent by weight. Heritage Crystal Clean still maintains it. The unit had operational instructions posted on it and the lid was closed during staff's inspection.

SEBCL INSPECTION CONCLUSION: The facility appears to be in COMPLIANCE with Section 1 of ROP No. MI-ROP-N5432-2016 at the present time. Staff then went with Josh on a limited tour of the landfill due to the depth of the snow around the landfill. Staff observed the groundwater treatment system, landfill filling operations, and lastly Josh showed us how he samples a gas well. Once back at the office, staff thanked Josh for his time and departed the facility at approximately 3:00 p.m.

NAME Matt Dark DATE 2-15-18 SUPERVISOR MD 2/20/2018