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

FACILITY: PINE TREE ACRES, INC.		SRN / ID: N5984	
LOCATION: 36600 29 MILE RD., LENOX		DISTRICT: Southeast Michigan	
CITY: LENOX		COUNTY: MACOMB	
CONTACT: Steve Walters , Environmental Engineer		ACTIVITY DATE: 04/12/2016	
STAFF: Rebecca Loftus COMPLIANCE STATUS: Compliance		SOURCE CLASS: MAJOR	
SUBJECT: Annual Inspection; s	ee also SRN: N8004 - Sumpter Energy		
RESOLVED COMPLAINTS:			

On April 12, 2016, I, Rebecca Loftus, from the Department of Environmental Quality (DEQ), Air Quality Division (AQD), conducted an inspection of Pine Tree Acres, Inc., SRN: N5984, located at 36600 29 Mile Road, in Lenox Township, Michigan. The purpose of this inspection was to determine the facility's compliance with the 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, Permit to Install (PTI) No. 160-14, and Renewable Operating Permit (ROP) No. MI-ROP-N5984-2013.

Upon arriving at the facility, I met with Steve Walters, Waste Management (WM) Environmental Engineer, Lee Bilinsky, WM Gas Plant Manager, Dave Bauman, WM Engine Plant Manager, Jason Neumann, ARIA Energy Regional Manager, and Emily Zambuto, ARIA Energy Manager of Environmental Programs (see N8004 - Sumpter Energy).

Below is a summary of my findings during my inspection and file review of Pine Tree Acres. Supporting documents and record keeping can be found on the attached CD.

Contacts

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Steve Walters, Environmental Engineer, 586-749-6122, SWalter3@wm.com Lee Bilinsky, Gas Plant Manager, 586-749-5182, LBilinsk@wm.com Dave Bauman, Engine Plant Manager, 586-651-6084, DBauman@wm.com

Facility Overview

Pine Tree Acres, Inc. (operated by Waste Management of Michigan, Inc.) owns and operates a municipal solid waste landfill, named Pine Tree Acres Landfill (PTA), located at 36600 29 Mile Road, Lenox Township, Macomb County, Michigan. Sumpter Energy Associates (operated by ARIA Energy) owns an electric generating facility that currently consists of nine internal combustion engines. Sumpter Energy receives its fuel, landfill gas (LFG), for nine internal combustion engines from Pine Tree Acres Landfill. The two companies have a contractual agreement in which PTA sells LFG to Sumpter Energy. Together these entities comprise one single stationary source; the SRN for Pine Tree Acres, Inc. is N5984, and the SRN for Sumpter Energy Associates is N8004.

PTA is a Type II Sanitary Landfill, which accepts and landfills municipal solid waste (MSW), bio-solids from wastewater treatment plants (sludge), and inert wastes such as construction debris, demolition debris, foundry sand, ash and low-level contaminated soils. The facility also accepts asbestos containing waste. Waste materials arrive in a variety of vehicles that have the potential to generate fugitive dust emissions; this is controlled by frequent wetting and sweeping of the entrance roads.

PTA owns approximately 700 acres in total; 560 acres of which are dedicated to landfill activities and a conservation easement. In 2010, PTA received approval for the expansion of Cells 19 through 23 and on May 8, 2015, PTA received approval for the 70 acre, eastern expansion: 7 cells in the land between the existing cells and County Line Road (see attached Solid Waste Permit). The current design capacity is 83,154,150 cubic yard and the life expectancy of the landfill is through the year 2042.

PTA operates a landfill gas collection system consisting of multiple LFG wells, the LFG header system, LFG treatment systems, and two sulfur treatment systems. The collected LFG can be routed to two enclosed flares, two open flares, eight reciprocating internal combustion engines (RICEs), and/or an additional nine engines located at the Sumpter Energy Engine Plants.

The landfill has a total of four flares: #4 and #6 are enclosed flares located near the main office building, #3 is a candle stick open flare located on the west side of the landfill, and #5 is a candle stick open flare located near cells 3 and 4.

On February 28, 2011, Pine Tree Acres, Inc. installed eight internal combustion engines, which are located across from the landfill, on the north side of 29 Mile Road. These engines are subject to 40 CFR, Part 60, Subpart JJJJ, New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines and 40 CFR, Part 63, Subpart ZZZZ, Maximum Achievable Control Technology Standards for Stationary Reciprocating Internal Combustion Engines.

On February 13, 2015, PTA obtained a permit (PTI No. 160-14) which allowed an increase in H2S concentrations/SO2 emissions; this permit also includes formaldehyde limits for the eight engines (See more details in the PTI section below).

PTA is also subject to the National Standards of Performance for Municipal Solid Waste Landfills, 40 CFR Part 60 Subpart WWW, and the National Emission Standards for Hazardous Air Pollutants for Municipal Solid Waste Landfills, 40 CFR Part 63 Subpart AAAA, and is permitted under ROP No. MI-ROP-N5984-2013.

The PTI and ROP have enforceable limits/conditions for the following: EULANDFILL, EUALGCS, EUTREATMENTSYS, EUASBESTOS, EUCOLDCLEANER, FGFLARES, FGOPENFLARES, FGICENGINES, and FGRICEMACT.

PTI No. 160-14

In 2014, WM requested to increase allowable concentrations of total reduced sulfurs/hydrogen sulfide at PTA. The increase in TRS/H2S would also increase the SO2 emissions from the source. See the file for detailed notes on the proposal, modeling, and permit conditions (including the files for voided applications 151-13 an 69-14).

On February 20, 2015, PTI No 160-14 was issued to PTA. This permit has conditions for the sulfur treatment systems, WM's engines, WM's flares, and gas sent to Sumpter Energy's Phase I Engine Plant (Engines #1-7). New emission limits in the PTI (that were not in the ROP) include an increased SO2 limit and a formaldehyde limit for the engines. The permit also includes a H2S concentration limit of 269ppm for all combustion equipment operated by WM and Sumpter Energy's Phase I Plant. (Note: Sumpter Energy Phase II receives gas that does not have sulfur removed-see SRN: N8004 for details).

Compliance activities associated with the PTI conditions can be found in each applicable section below.

Landfill/Gas Collection System

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At the time of my inspection, PTA was actively placing waste in cell #23 and Mr. Walters noted Cells #19-22 have approximately 30 feet of air space remaining (see attached map for location). Mr. Walters also explained, PTA had completed Phase I construction in late February which added 22 new vertical wells in Cells #19-22. PTA started filling Cells #19-20 in August of 2010, therefore in August 2015 the wells in these cells will become subject to the NSPS; PTA began filling cell number 21 in January 2012.

Currently, PTA receives 5-6,000 tons/day of waste and WWTP sludge makes up approximately 5% (previously 10%) of the accepted waste. According to the MAERS report, PTA received 1,524,396 tons of waste in 2015 and with this year's projections, PTA anticipates collecting approximately 1.7 million tons in 2016. The total waste in place through 2015 is 32,182,568 tons.

PTA is collecting LFG at flows rates of approximately 9-10,000 scfm (the flows appear to be leveling off at 10,000). The GCCS design plan was last updated in August 2010 and the SSM was submitted in January 2016.

PTA's ROP has two sections covering the landfill and gas collection system, EULANDFILL and EUALGCS. During my inspection, WM provided me with copies of the surface methane monitoring reports, monthly integrity checks, the LFG NSPS parameters report, and a list of current wells under a NSPS variance. The records provided are needed to demonstrate compliance with the ROP and federal landfill regulations. Summaries of the reviewed reports have been provided below.

The 3rd and 4th quarterly surface methane scans were conducted on September 3-4, 2015, and December 23, 2015 (see attached reports/CD). For the 3rd quarter, there were 26 locations at the landfill initially exceeded 500ppm methane. Mr. Walters explained that an engine at PTA's Plant went down in the middle of the scan causing back pressure on the landfill and the landfill cover was quite dry due to the hot August weather; each description for the locations mentions cracking in the landfill surface. After conducting remedial actions(which included riser repairs and adding cover), the 10 day check showed all locations had drop below 500ppm; and after 30days all locations were cleared. For the 4th quarter, five locations at the landfill initially exceeded 500ppm methane. After conducting remedial actions, the 10 day/30day checks showed the concentrations were below 500ppm. Based on the results, the initial exceedances appear to be successfully remediated by PTA.

According to the records, WM conducts monthly integrity checks of the landfill cover. The attached records are from January through April 2016. Each entry list the date, technician, corrective action needed, and when the repairs occurred.

Currently, PTA's wellfield consists of approximately 405 collectors; of which approximately 310 are subject to NSPS WWW. On a monthly basis, WM monitors temperature, oxygen, and pressure for each NSPS subject well (see the attached CD for the January 2016 Data; all data is available electronically on-site). According to these records and PTA's semi-annual reports,

WM properly documents instances in which wells have temperature, oxygen, and/or pressure exceedances. In the instances in which an exceedance cannot be corrected within 15 days, WM has requested higher operating variance, alternative timelines, and/or to decommission wells (see file for individual request). During my inspection, WM provided me with a list of the wells currently operating under a NSPS variance (see attached CD). At this time, 30 collectors are operating under an oxygen variance, 26 under a pressure variance, and 40 under a temperature variance. The list is consistent with the Higher Operating Value Requests received by the AQD.

Based on the records provided, at this time, PTA appears to be in compliance with the conditions listed in EULANDFILL and EUALGCS.

Treatment Systems

As part of the LFG collection and control system, PTA's has LFG treatment systems which filter particulate matter, remove moisture, and compress the LFG; the treatment systems are designated in the ROP as EUTREATMENTSYS. The central blow station treatment system is used to process the gas prior to it being sent to WM's eight Reciprocating Internal Combustion Engines and Sumpter Energy's nine engines. Additional back-up treatment systems can be found outside Sumpter Energy's Plant I and WMRE's Engine Plant. The system located at the Sumpter Plant is in standby as it was previously used for final filtration; the gas currently routed to the plant is from the Central Blower. The treatment system at the WMRE Engine plant can run on parasitic load (4MW) if they need to increase the gas pressure from the Central Blower.

The Preventative Maintenance Plan for the Treatment Systems were last updated in 2013 (see file for plan).

Copies of the treatment system maintenance logs for 2015 and 2016 were provided during my inspection (see attached CD). All maintenance activities are kept on-site in a binder and any noted malfunctions are reported in the semiannual reports.

At this time, PTA appears to be in compliance with the conditions listed in the ROP under EUTREATMENTSYS.

Sulfur Treatment Systems

Due to the H2S concentrations of the gas, PTA currently has two sulfur removal systems in which they can treat LFG: a non-renewable system – Sulfa Treat (currently used as back-up) and a renewable system – Thiopaq. The requirements for these systems can be found throughout the PTI and ROP.

PTA is required to treat the landfill gas so that H2S concentrations do not exceed 269ppm. During my inspection, Mr. Walters provided me with copies of the daily H2S readings for 2015 through March 2016 (see attached). Daily readings are measure with dragger tubes and LFG drawn from Tedlar sampling bags which provide steady pressure and flow. The readings are taken at the flares and at the WM engine plant. On a quarterly basis, WM sends samples to the lab to verify the daily dragger tube results.

On March 21, 2016, PTA submitted a requested to reduce daily readings to weekly readings, as allowed in their PTI. This request was granted and is reflected in the data provided by PTA (see attached CD).

During my inspection, Mr. Walters showed me the constructed slip stream bypass near the Thiopaq tower. This will allow PTA to blend sulfur treated gas with untreated LFG before sending it to be combusted in the flares or engines. Samples for H2S can also be collected here as WM can control the flow. Mr. Bilinsky explained this bypass is only used if there is an upset in the Thiopaq System; otherwise, all landfill gas goes through the treatment system. Mr. Walters clarified the H2S concentrations that are reported are the concentrations of the gas after this mixing area.

Based on the provided records, the pretreatment values of H2S range from 470ppm to 750ppm, and the post treatment values, obtained near the flares and WMRE Engine Plant, are between 50ppm and 250ppm (below permit limits).

Mr. Bilinsky is currently the head operator for the Thiopaq Sulfur Treatment System. He explained that Thiopaq operations have greatly improved since closely monitoring flow for consistency. Sulfa Treat is now only used as back-up when Thiopaq is down due to maintenance or system upsets that kill off the bugs. Average flows to Thiopaq are approximately 8500 scfm and during my inspection the flow was 8736 scfm.

Mr. Bilinsky provided me with copies of the computer readouts for the treatment system from January through April 2016 (see attached CD). These records contain all the parameters of the sulfur treatment systems and H2S data. In addition, Mr. Bilinsky had maintenance records of the equipment available on-site. During my inspection, I noted that on April 11, 2016, Thiopaq was treating flows at 8904scfm and decreasing H2S concentrations to 120ppm.

The Malfunction Abatement Plan for the Sulfur Treatment Systems was last updated in April 2015 (see file for plan).

At this time, PTA appears to be in compliance with the Sulfur Treatment System conditions listed in the PTI and ROP.

Flares

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PTA's is permitted to operate two enclosed flares and two open flares. The PTI and ROP have emission limits for SO2, CO, NOx, PM and Visible Emissions, as well as special conditions for testing, recordkeeping, maintenance activities, and operational restrictions.

Equipment	Туре	Capacity (CFM)	Install Dates
Flare #3	open	3,000	Aug 2005/ Aug 2006
Flare #4	enclosed	3,000	2009
Flare #5	open - back up only	2,100	2009
Flare #6	enclosed	6,100	2009/2010

The flares are continuously monitored and the temperatures are recorded every 10 minutes. WM appropriately reports any flare downtime in their Annual/Semi-Annual reports. The emissions data is reported yearly in the Michigan Air Emissions Reporting System (MAERS). In 2013, WM installed the Golder Watch system at PTA, which allows them to monitor the flares and compressor remotely. This system also collects and stores greenhouse gas data.

At the time of my inspection, Mr. Walters provided me copies of the Flare data from January through April 2016. These records include run time, temperature, and flow data (see attached CD). In addition, the SO2/H2S report for each flare was provided. As noted earlier in my report, all post sulfur treatment readings are below the permit limit of 269ppm. During my inspection I reviewed the maintenance records, which are available on-site.

At the time of my inspection only Flare #4 was operating. Mr. Walters explained, PTA did operate Flare #3 briefly in January 2016 and Flare #5 is only used as back-up.

The previous stack tests on the enclosed flares were conducted in 2010. On February 17-18, 2016, PTA tested the flares to demonstrate compliance with the limits in the PTI. See additional details in the Compliance Testing section below.

Observations during inspection:

	Flow	Temp	Pressure
	(scfm)	(°F)	(psi)
Flare 4	1454	1656	
LES Engine Plant #2	999		4.5

At this time, PTA appears to be in compliance with the conditions listed in the PTI and ROP under FGFLARES and FGOPENFLARES.

<u>Asbestos</u>

PTA does accept asbestos containing waste. These activities are permitted in the ROP under EUASBESTOS. Mr. Walters explained, because of the increase in demolition waste, PTA is seeing an increase in asbestos containing waste; they are currently receiving 1-6 loads per day.

When asbestos waste is accepted, WM records the coordinates in there database so that in the future they can avoid drilling wells in those areas. If a well is needed in those areas, WM is required to submit a notification to the AQD before drilling occurs. At this time, PTA appears to be in compliance with the conditions listed in EUASBESTOS.

Cold Cleaners

PTA has one cold cleaner located in the landfill garage. This unit is permitted in the ROP under EUCOLDCLEANER and at this time, PTA appears to be in compliance with the conditions listed in the ROP.

Engines

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The PTI and ROP has emission limits for CO, NOx, PM, VOC, and Visible Emissions, as well as special conditions for testing, recordkeeping, maintenance activities, and operational restrictions.

Engine Specifications						· · · · · · · · · · · · · · · · · · ·
Emission Unit ID	Make	Model	Model Year	Fuel	Serial #	Max Engine Power (bhp)
EUICENGINE1	Lean Burn; 4 stroke	CAT G3520C	2010	LFG	GZJ00469	2333
EUICENGINE2	Lean Burn; 4 stroke	CAT G3520C	2010	LFG	GXJ00464	2333
EUICENGINE3	Lean Burn; 4 stroke	CAT G3520C	2010	LFG	GXJ00467	2333
EUICENGINE4	Lean Burn; 4 stroke	CAT G3520C	2010	LFG	GXJ00466	2333
EUICENGINE5	Lean Burn; 4 stroke	CAT G3520C	2010	LFG	GXJ00462	2333
EUICENGINE6	Lean Burn; 4 stroke	CAT G3520C	2010	LFG	GXJ00468	2333
EUICENGINE7	Lean Burn; 4 stroke	CAT G3520C	2010	LFG	GXJ00463	2333
EUICENGINE8	Lean Burn; 4 stroke	CAT G3520C	2010	LFG	GXJ00465	2333

Engine Specifications

I recorded the following engine parameters during my inspection:

Total Plant (KW)	11306	Gas Quality	%
Average Battery (volts)	25.5	CH4	51.2
Btu set point	467	CO2	41.7
Cylinder Temp Ranges (°F)	1094-1128	Balance Gas N	6.4
		02	0.60

	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Engine Hours	35137	35140.45	35299.55	35255.83
Actual Engine Speed (rpm)	1200	1201	1201	1201
Generator Total Real Power (Kw)	1655	1685	1632	1672
Engine Load Factor (%)	96-100	100	98-100	96-100
Actual Engine Ignition Timing (Deg.)	28	28	28	28
Dentation	0-1	0-1	0-1	0-1
Inlet Manifold Air Pressure ABS (psi)	48.1	49.9	48.4	49.2
Inlet Air Temperature (°F)	122	136	128	127
Engine Oil Temp (°F)	198	203	198	203
Engine Coolant Temp (°F)	228	223	225	219
Desired Engine Speed (rpm)	1200	1202	1201	1201
Throttle Actuator Position %	58.54	99-100*	54.9	53.17
Engine Droop %	0	0	0	0
Air Flow Intake Manifold (scfm)	4622	4751	4617	4705
Air to Fuel Ratio	8.6	8.8	8.6	8.7
Gas Fuel Flow (scfm)	543	540	537	542
Fuel Valve %	54	53	53	54
Frequency (Hz)	59.9	60	60	59.9
Generator Ave RMS Voltage	4232	4232	4232	4229
Generator Total RMS current (Amps)	657	672	690	67 <u>3</u>
Power Factor	0.996	0.996	0.993	0.997
Fuel Btu	467	467	468	466

*Mr. Bauman explained the throttle is sticking on Engine #2 and sometimes on Engine #7. The throttle on Engine #2 will be replaced in the near future when the engine is taken off-line for maintenance.

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	Engine No. 5	Engine No. 6	Engine No. 7	Engine No. 8
Engine Hours	35130.73	35176.32	35220.3	35211.98
Actual Engine Speed (rpm)	1201	1201	1201	1201
Generator Total Real Power (Kw)	1657	1629	1651	1627
Engine Load Factor (%)	98	98	95-99	99-100
Actual Engine Ignition Timing (Deg.)	28	28	28	28
Dentation	1	1	1	1
Inlet Manifold Air Pressure ABS (psi)	50.5	48.3	49.8	51.3
Inlet Air Temperature (°F)	137	126	131	141
Engine Oil Temp (°F)	210	203	198	201
Engine Coolant Temp (°F)	226	225	219	221
Desired Engine Speed (rpm)	1201	1200	1201	1201
Throttle Actuator Position %	50.56	52.71	63.59	61.43
Engine Droop %	0	0	0	0
Air Flow Intake Manifold (scfm)	4767	46 <u>51</u>	4737	4780
Air to Fuel Ratio	8.6	8.7	8.7	8.9
Gas Fuel Flow (scfm)	552	540	545	539
Fuel Valve %	55	53	54	54
Frequency (Hz)	59.9	60	60	60
Generator Ave RMS Voltage	4243	4234	4235	4233
Generator Total RMS current (Amps)	685	681	674	675
Power Factor	0.995	0.997	0.998	59.9
Fuel Btu	466	466	464	466

Mr. Bauman provided the engine monthly operating reports (MORs) for January, February, and March 2016. These reports include the monthly summary data as well as daily records for each engine (see attached CD). Each engine has a composition notebook for maintenance activities; these were available for review on-site during my inspection.

No engine Swap-outs have occurred at the WM Engine Plant. During my inspection, staff indicated that, for WM, a swap-out may occur after 50,000 hours on an engine.

Based on my review of the records and my observations during the inspection, the engines are operating similar to the conditions during the last stack test and the engines appear to be in compliance with the conditions of PTI No. 160-14 and the ROP.

In addition to the permit requirements, the engines are subject to the National Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR Part 60 Subpart JJJJ (NSPS JJJJ) and the National Emission Standards for Hazardous Air Pollutant for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subpart ZZZZ (NESHAP ZZZZ). The initial notification for NSPS JJJJ was received on March 4, 2011, and the initial notification and annual report for NESHAP ZZZZ were received on January 11, 2013. Annual NESHAP ZZZZ reports are currently submitted with all other annual/semi-annual reports. These reports were received on time for the 2015 reporting period.

Compliance Testing

During the weeks of February 8-19, 2016, WM tested their eight CAT G3520C, gas-fired, reciprocating internal combustion engines, EUICENGINE1 through EUICENGINE8 for CO, NOx, and VOC. In addition, Formaldehyde and SO2 were tested on one engine. EUFLARE4 and EUFLARE6 were tested to verify visible emissions and mass emission rates for CO, NOx, and SO2.

On April 14, 2016, Mr. Walters contacted the AQD to notify us of a failed stack test on one of the eight Caterpillar engines at Pine Tree's WMRE engine plant. The parameter that was exceeded was CO on engine #5. Additional details can be found in my Stack Test Observation Report dated February 9, 2016. The AQD issued a Violation notice to PTA on April 27, 2016, and the Engine #8 re-test occurred on April 20, 2016.

The results from the performance testing were received on April 20, 2016, and the retest results were received on April 25, 2016 (see attached summary of results). Based on the test report and data received, the engines appear to be in compliance in compliance with the permit limits for CO, NOx, SO2, and Formaldehyde. In addition, the results for Flare #4 and Flare #6 demonstrate compliance with the permit limits for visible emissions, CO, NOx, and SO2.

MAERS

For 2015, PTA reported the following emissions:

Tons
378.31
94.06
86.45
58.87
3.65
43.99
22.46

Note: Formaldehyde emissions from the engines were not included in the reported VOC emissions.

MAP/PMP/SSM Updates

On April 26, 2013, the AQD received the Malfunction Abatement/Preventative Maintenance Plans required by the permit for the treatment systems, Flares 4 and 6, the sulfur removal systems, and the landfill engines. On April 15, 2015, the AQD received updated plans (MAP/PMP/SSM) for the sulfur removal systems and the engines as required by the newly issued PTI. The GCCS design plan was last updated in August 2010 and the SSM was submitted in January 2016. See Plans in File.

Other Equipment

> Currently there are no emergency generators located on-site. The following equipment is onsite, but conditions are not included in the ROP as they are exempt pursuant to Rule 212(4):

Emission Unit ID	Description	Rule 212(3) or Rule 212(4) Exemption	Rule 201 Exemption
EUGASTANK	500 Gallon Unleaded Gasoline tank	R 336.1212(4)(c)	Rule 284(g)
EUDIESELTANK1	12,000 Gallon Diesel tank	R 336.1212(3)(e)	Rule 284(d)
EUDIESELTANK2	500 Gallon Diesel tank	R 336.1212(3)(e)	Rule 284(d)
EUHYDRAULIC	400 Gallon Hydraulic oil tank	R 336.1212(3)(e)	Rule 284(c)
EUTRANSMISSION	400 Gallon Transmission Fluid	R 336.1212(3)(e)	Rule 284(c)
EUUSED OIL	300 Gallon Used oil tank	R 336.1212(3)(e)	Rule 284(c)
EUSEDOIL2	300 Gallon used oil tank	R 336.1212(3)(e)	Rule 284(c)
EUENGINEOIL	2000 Gallon engine oil tank	R 336.1212(3)(e)	Rule 284(c)
EUUSEDOIL2	2000 gallon used oil tank	R 336.1212(3)(e)	Rule 284(c)
EUCAUSTICTANK	6,650 gallon caustic tank	R 336.1212(3)(e)	Rule 284 (h)
EUCOOLTANK	750 gallon coolant tank	R 336.1212(3)(e)	Rule 284(h)
EULEACHATE1	40,000 gallon above ground leachate storage tank	R336.1212(3)(f)	Rule 285(aa)
EULEACHATE2	400,000 gallon above ground leachate storage tank	R336.1212(3)(f)	Rule 285(aa)

Mr. Walters also provided the following list of heaters exempt from obtaining a permit to install pursuant to Rule 282(b)(i):

Equipment Type	Equipment Location	Maximum Rated Capacity of Equipment (MMBtu/hr)	Fuel Used to Run Equipment
Hot Water Heater	Gate/Scale House	0.04	Propane
Hot Water Heater	Maintenance Shop	1.04	Propane
Propane Heater	Gate/Scale House	0.065	Propane
Propane Heater	Maintenance Shop	0.1	Propane
Propane Heater	Maintenance Shop	0.1	Propane
Propane Heater	Maintenance Shop	0.1	Propane
Propane Heater	Maintenance Shop	0.1	Propane
Propane Heater	Recycling Facility	0.1	Propane
Propane Heater	Recycling Facility	0.1	Propane
Propane Heater	Maintenance Shop	0.441435	Propane
Propane Heater	Maintenance Shop	0.065	Propane

Additional Information

The ROP modification, to include the PTI conditions, could not be processed until all conditions in the PTI were met, this required a year's worth of SO2 data (ending February 13, 2016).

On February 25, 2016, PTA submitted an application for an Administrative Amendment to incorporate PTI 160-14 into ROP MI-ROP-N5984-2013. The application also included a request to correct the permittee name of the PTI to the name on the existing ROP: Pine Tree Acres, Inc. At the time of my inspection, the ROP modification application is being processed by Caryn Owens and should be issued in the Summer of 2016.

Conclusions

Based on information gathered during the inspection and the records reviewed, PTA appears to be in compliance with the Federal Clean Air Act, Michigan's Air Pollution Control Rules, the conditions of PTI No. 160-14 and ROP No. MI-ROP-N5984-2013.

For details on the Sumpter Energy Inspection, see the report for SRN: N8004.

UPDATE

The ROP modification was approved by the AQD on August 1, 2016. PTI No 160-14 has been incorporated into the ROP; the ROP is now: MI-ROP-N5984-2013a.

SUPERVISOR