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

N753654311				
FACILITY: SKLARCZYK SEED FARM LLC		SRN / ID: N7536		
LOCATION: 8714 M-32 EAST, JOHANNESBURG		DISTRICT: Gaylord		
CITY: JOHANNESBURG		COUNTY: OTSEGO		
CONTACT:		ACTIVITY DATE: 07/23/2020		
STAFF: Sharon LeBlanc	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR		
SUBJECT: Scheduled inspection for 2020 fiscal year. sgl				
RESOLVED COMPLAINTS:				

On July 23, 2020, AQD District Staff arrived onsite to conduct a scheduled site inspection of the Sklarczyk Seed Farm, LLC, 8714 M-32 East, Johannesburg, Otsego County, Michigan (N7536). The referenced facility is a true minor source operating under Permit to Install (PTI) 124-18, issued on September 17, 2018. The purpose of the site inspection was to determine Facility compliance with respect to the referenced permit.

District Staff met with Scott Payton, at the time of the inspection.

FACILITY

Located at 8714 M-32 East, west of Johannesburg, Michigan, the referenced facility is a commercial potato seed producer. The facility as indicated by the property address is located on M-32, approximately 11 miles east of Gaylord and 2 miles west of Johannesburg, Michigan.

Information available on the Company website indicated that the farm was purchased in 1942, growing potatoes and other crops on the acreage. In the 1980's the facility shifted to tissue culture for seed potato production, and in the late 1990's shifted to hydroponic seed potato production activities.

The facility presently consists of approximately 650 acres in crop production. Potato seed production (non-GMO) is in three polytop greenhouses and a five-bay glass house. Per the company website the company produced over four million seed potatoes in 2016. During the July 23, 2020, site inspection it was reported that an additional added an additional greenhouse and associated out buildings to meet clients GMO product needs.

The source reports using exempt NG space heaters (high efficiency Buderus) as primary heaters and the permitted waste-oil heater as supplemental heat to maintain growing temperatures during the colder months. Principally in November or late February-early March. Onsite staff report that there are no plants in December and January, so there would be no supplemental heating required.

In addition to the NG and waste oil heaters mentioned above, the Facility is reported to also have a smaller ozone generator previously used to put oxygen into the hydroponic water solution. The unit is reported to be too small for their present needs and is not in use. The facility also reports having a 110 KW emergency generator on site. As an area source, AQD is not delegated authority for Reciprocating Internal Combustion Engines (RICE) at an area source under the NESHAP or NSPS at this time. The facility has previously been provided with links to Federal Regs to determine what requirements they may have.

PERMITTING

PTI 253-05 was issued on October 11, 2005. The permit was issued for two Shenandoah waste oil space heaters with heat input of 500,000 BTU/Hr each (EU-HEATER1 and EUHEATER2). The permit application reported that one space heater was purchased in 2003 and the other rebuilt by the company in 2004. The units were supplements to existing LP-fired, in-floor heater in use in the greenhouses. At the time of permitting, the Facility reported the source of the oil being not only generated onsite but obtained from other sources such as the Johannesburg Lewiston School Bus Garage, other local farmers and oil company compressor engines.

As previously indicated the two previously permitted waste oil heaters, were replaced by a single larger unit (Alternate Heating Systems, inc.), which did not meet Rule 201 exemption requirements. This unit was permitted on September 17, 2018 and operates under PTI 124-18.

COMPLIANCE

During the April 27, 2018, site visit, District Staff determined that two permitted heaters (PTI 253-05) had been replaced with what was then reported as a single 800,000-plus BTU waste oil heater. District Staff explained that the swap out would require a permit modification to address the equipment change. The resulting permit is PTI 124-18, referenced above.

During the April 1, 2019, site inspection monitoring and recordkeeping issues were noted, and suggestions provided to Facility staff.

No complaints or additional violations have been associated with the Facility since the April 1, 2019 site inspection.

Compliance status for the facility had been based on information provided during the July 23, 2020, site inspection, as well as on laboratory analytical data obtained on waste oil samples collected as part of the site inspection.

EUHEATER1

This EU consists of an Alternate Heating Systems Inc. model B1000, 990,000 Btu/Hr used oil-fired boiler/heater. No pollution control device is associated with the EU. No emission or reporting limits are associated with the EU in PTI 124-18. This unit is a secondary heating unit, for supplemental heat to the greenhouses during November and/or late February- early March. No plants are reported in December and January, so supplemental heat would not be required. The waste oil heater is not on a logic system and has to be manually turned on for operation. The unit was reported to have been used this winter for only a limited period of time.

The Facility staff reported that fuels are presently obtained from the farm machinery as well as from oil change out of compressor engine oil at oil and gas facilities in the area. Fuels are stored outside in a 1500 gallon, above ground, metal exterior, double-wall storage tank. Fuels are piped to a smaller tank in the room that houses the heaters. Transfer from the outer to inner tank is initiated by manually opening a valve for gravity feed from the larger to smaller tank. The smaller tank has a site glass to determine the depth of fuel in the tank. Facility staff have determined a "gallons per inch" conversion for the inner/smaller tank. A clip board kept at the smaller tank documents the date the fuel oil heater is turned on and turned off, and the volume of fuel oil used.

The Facility has indicated that they are thinking about converting the waste oil heater to NG. They have been advised that a permit may be required, and that if the discussions become serious to contact the district so a determination can be made. Initial discussions between the District and Permit section has indicated that based on our understanding that the unit would meet the definition of "fuel burning equipment" that the unit would most likely be exempt from permitting as it would be anticipated to be less than 10 MMBtus heat input and use a sweet burning fuel and exempt under Rule 282 (2)(b)(i).

<u>MATERIAL LIMITS</u> -- Fuels for EUHEATER1 are limited to No's 1 & 2 virgin fuel oil and used oils that do not exceed the standards in Appendix A of PTI 124-18. The sources of the used oil may include oil generated by the permittee, household "do-ityourselfers" and from used oil collection centers as long as it has not been contaminated by physical or chemical impurities. (SC II.1) The Facility reports that the waste oil furnace fuels meet the requirement.

The permittee is limited to a maximum of 60 gallons per day of fuels as listed above (SC II.2). The facility reports hardly operating the unit this winter, though they report operating the unit since the previous site visit to "use up some oil". These dates include May 3-20, 2019, December 10-15, 2019, May 29 to June 8, 2020 and June 8 – 17, 2020. The maximum reported fuel usages coincide with the two later operational periods and reported usage of 10 inches and 20-inches (35 and 70 gallons), respectively. Which equates to less than two inches (7-gallons) per day, well under the 60 gallon per day limit.

<u>OPERATION LIMITS</u> – Used oil fuels burnt in EUHEATER1 are required to be pretreated to reduce water and sediment. (Special Condition (SC) IV.1) Upon inquiry, the Facility reports sediments are drainable from the bottom of both the 1,500-gallon outdoor and the smaller indoor oil tanks. No in-line sediment filters are in place. Water separation is limited to in tank separation due to density of the different fluids. No monitoring plan for determining or monitoring water depths in the tanks had been implemented to reduce water content for the fuel oils.

The permittee is required to remove deposited materials from the EUHEATER1 ash pan, to prevent entrainment of materials into the exhaust. (SC III.1) At the time of the inspection the unit was not in use and was reported to been infrequently used this winter therefore not requiring ash removal.

SC III.2 requires the permittee to follow the Compliance Monitoring Plan (CMP) in Appendix A of the PTI or an alternate plan approved by the AQD District Supervisor. The referenced plan requires documentation from used oil supplier for each shipment that demonstrates that the used oil meets specification levels in 40 CFR 279.11 (Standards of Management of Used Oil) and Rule 299.9809 (Part 111, Hazardous Waste Management of Natural Resources and Environmental Protection act, 1994 PA 451, as amended). The documentation shall include:

- Supplier certification and analytical data for oil generated within the most recent 12-month period.
- The Analytical data must be representative of the used oil accepted for use as fuel by the permittee.
- Separate truckloads may have identical documentation from supplier if they are generated by the same process from a single supplier.
- Analysis records shall indicate that the parameters do not exceed allowable used oil specifications from Table 1 of the CMP.

The CMP requires that the analysis records for each shipment be maintained by the

Facility for a minimum of 5 years. Should a delivery be required, the Facility has indicated that they will request the required records and keep the documentation on file.

TESTING ACTIVITIES -

Under PTI 124-18, The permittee is required to conduct and submit a used oil fuel analysis 60-days following written notification of the AQD District Supervisor. (SC V.1) To date no written notification has been submitted, therefore the requirement is not applicable at this time.

At the time of the July 23, 2020, site inspection, District Staff collected samples with Facility representatives of used oil stored onsite for verification that the used oil meets the Federal and State requirements outlined in the CMP (SC V.2). Samples collected were delivered to Merit Laboratories for analysis.

Parameter	Grab Sample (Grab-1)	Duplicate Sample (Dupe)	Grab Sample (Grab Sample RUO#2)	Duplicate Sample (Dupe-2)	Maximum Allowable Level (PPMW unless other indicated)
Date Sampled	April 1 st , 2019	April 1 st , 2019	July 23, 2020	July 23, 2020	
Arsenic	<0.2	<0.2	<0.2	<0.2	5.0
Cadmium	<0.2	<0.2	<0.2	<0.2	2.0
Chromium	<0.2	<0.2	<0.5	<0.5	10.0
Lead	0.70	0.72	0.79	0.85	100.0
Sulfur	0.267	0.225	0.23	0.19	1.0 percent
PCBs*	<7*	<7*	<7*	<7*	1.0
Total Halogens	<200	<200	<200	<200	1,000

Analytical data for the referenced sample indicated the following

* Merit Labs analyzed for a total of 7 different PCBs, none of which were reported detectable at 1.0 ppmw.

Higher heating values for the referenced dates were reported to be the following:

SAMPLE Date	SAMPLE ID	Higher Heating Value Reported (BTU/LB)	Minimum Allowable Level (BTU/LB)
April 1 st , 2019	Grab-1	19,067*	17,000
April 1 st , 2019	Dupe	16,260*	17,000
July 23, 2020	Grab Sample RUO#2	17,900	17,000
July 23, 2020	Dupe-2	19,300	17,000

* average of the two samples is 17,663.5 BTU/lb.

Laboratory analyticals for the most recent sampling indicate the samples collected are compliant with permit limits.

<u>MONITORING/RECORDKEEPING</u> – Monitoring and recordkeeping requirements for EUHEATER1 include the following daily records for a period of 5 years. (SC VI.1):

- Source,
- Type of fuel
- Gallons of fuel combusted

Facility staff indicated that there are no logic or other data monitoring systems that would provide information regarding daily operation and daily fuel usage for EUHEATER1. The EU runs on RUO from the facilities tank in compliance with the permit. The EU must be manually turned on and off. With records consisting of the day started and stopped, and fuel usage in the form of changes in fuel levels in the secondary fuel tank.

The secondary fuel tank is a smaller oil tank with a site glass is kept in the heater room/passage, and it is this tank that directly feeds the waste oil heater. As the heater is reported to turn itself off and on (once the manual switch is turned on) to provide supplemental heat as required rather than continuous operation. Visually the secondary oil tank appears to have been constructed by the facility, is fairly consistent in shape except for the angled top. Dimension wise it appeared the secondary tank may hold approximately 50-gallons or less. Staff indicated that due to the intermittent operation of the heater (once turned on) that it uses very little oil, and the volume would be hard to determine for short periods of heater operation. Facility staff indicated that this smaller tank is gravity fed from the larger outside tank, and that the tap must be manually opened and closed to fill the tank, and that there is an auto shut off when the tank is full.

Monthly records required to be kept by the Facility includes records required for the CMP (SC VI.2), as already noted, the Facility reports not having received any deliveries from vendors, that would have required collection of documentation on a monthly basis.

OTHER REQUIREMENTS-

Stack requirements for EUHEATER1, indicate that the stack will be discharged vertically upwards to the ambient air and will meet the following construction criteria:

	Diameter	Height	
Limits	10-inches	20-ft	
(SC VIII.1)	(Maximum)	(Minimum)	

Two stacks are visible from the parking area, one is composed of what appears to be 4 independent white pipes coming from a single stack. This stack is reported to be for the four Buderus heaters and no stack restrictions exist.

The second stack is a taller metal, vertical stack that has a cap. The stack is reported to be the stack for the previous waste oil heaters, which would explain the

discoloration from use that was noted at the top of the stack. Based on the wording of the permit condition which requires a vertical discharge, but does not specify vertical and unobstructed discharge, the stack appears to be in compliance with permit condition VIII.1.

The permit contains a high-level citation indicating that the permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart JJJJJJ (Industrial, Commercial and Institutional Boilers at Area Sources) (SC IX.1). At the time of permit issuance, and site inspection, the MDEQ AQD does not have delegation for the referenced Federal Standards. As a result, compliance with the referenced standards has not been determined at this time. The facility following the 2019 site inspection was provided with links to allow them to determine requirements.

SUMMARY

On July 23, 2020, AQD District Staff arrived onsite to conduct a scheduled site inspection of the Sklarczyk Seed Farm, LLC, 8714 M-32 East, Johannesburg, Otsego County, Michigan (N7536). The referenced facility is a true minor source operating under Permit to Install (PTI) 124-18, issued on September 17, 2018. The purpose of the site inspection was to determine Facility compliance with respect to the referenced permit. District Staff met with Scott Payton, at the time of the inspection.

Located at 8714 M-32 East, west of Johannesburg, Michigan, the referenced facility is a commercial potato seed producer. The facility as indicated by the property address is located on M-32, approximately 11 miles east of Gaylord and 2 miles west of Johannesburg, Michigan.

During previous site inspections on April 27, 2018 and April 1, 2019, a Rule 201 violation for an unpermitted waste oil heater and non-compliance with PTI 124-18 recordkeeping requirements were identified, respectively. In addition, Fuel/Waste oil samples collected at the time of the April 1st, 2019, site inspection were analyzed by Merit Laboratories. Laboratory analytical reports indicated that with the exception of the Higher Heating Value reported for the dupe sample, that all parameter thresholds were met. A repeat sampling for heating value of the waste oil to be used was conducted during the July 23, 2020, site inspection. Analytical reports for the referenced samples collected reported all parameter concentrations in compliance with permit limits.

Based on the information obtained in association with the July 23, 2020 event, the Facility appears to be in general compliance with its PTI.

NAME

Sharon LeBlanc

DATE_____

SUPERVISOR_____