

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

P052642296

FACILITY: Great Lakes Fusion, LLC		SRN / ID: P0526
LOCATION: Business Development, DURAND		DISTRICT: Lansing
CITY: DURAND		COUNTY: SHIAWASSEE
CONTACT: Bryan Marks , Member		ACTIVITY DATE: 10/25/2017
STAFF: Julie Brunner	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Portable crushing plant operating per the conditions of GPTI 99-14		
RESOLVED COMPLAINTS:		

On October 25, 2017, I conducted an unannounced, scheduled inspection of the Great Lakes Fusion (LLC) portable non-metallic mineral crushing plant operating per the requirements of General Permit to Install (GPTI) No. 99-14. The operation includes crushing, screening, and conveying equipment, and portable diesel fuel-fired generators located on the crusher and screen power the plant. This portable crushing plant was owned and operated by Heritage Resources Inc. and was last inspected on October 22, 2014.

Portable Plant Contacts:

Mr. Bryan Marks, Great Lakes Fusion, Owner, 989-288-2656, bmarks@greatlakesfusion.com
Mr. Joe Libby, Great Lakes Fusion, Sales, 989-288-2656, jlibby@greatlakesfusion.com

Relocation Notice (6/15/2017):

TBN Property Management
7505 E. M-71, Durand, MI 48429
Dates: 6/19/2017 to 10/31/2017
Amounts to be processed: 80,000 to 100,000 tons

Facility Description:

The portable crushing plant was relocated to the property of the former Premarc Corporation which manufactured concrete and steel products and components, offering reinforced and non-reinforced concrete pipe products for culvert, storm and sanitary sewer applications, pre-stressed concrete bridge beams and corrugated metal pipe. In November 2011, Premarc filed for relief under Chapter 11 of the United States Bankruptcy Code.

Mr. Bryan Marks bought the property in 2014 which included the manufacturing plant, and a large dirt/gravel yard (~ 40 acres) where concrete pipe left from Premarc was stored. Mr. Marks owns and operates GLF which is a construction company.

Mr. Marks bought the used portable crusher to crush all the concrete pipe left over from Premarc. He already had local approval for the land use. Once the on-site concrete pipe was all crushed, then the portable crusher would be used by his construction company.

GLF is located southeast of Durand. The area surrounding the plant is mixed use with residential housing to the west and north and agricultural and commercial properties surrounding it.

Regulatory Review:

Portable crushing plants are minor sources of any regulated air contaminants including hazardous air pollutants (HAPs) and not subject to the Title V Renewable Operating Permit (ROP) program. Equipment that is part of a portable crushing plant could be subject to the New Source Performance Standard (NSPS) in 40 CFR 60, Subpart OOO — Standards of Performance for Nonmetallic Mineral Processing Plants as follows:

§60.670 Applicability and designation of affected facility.

(a)(1) Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station....

The equipment permitted on GPTI 99-14 is subject to the requirements of 40 CFR 60, Subpart OOO as indicated on the GPTI Application form. The affected facility is capable of processing greater than 150 tons per hour, and each piece of equipment is subject if it was constructed after August 31, 1983.

The portable diesel fuel-fired generators are considered non-stationary and non-road. The designation of the diesel engine as a non-stationary engine establishes that they are not subject to 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The designation of the diesel engine as a non-road engine establishes that it is not subject to 40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Michigan Air Emissions Reporting System (MAERS):

The facility reports to MAERS as a Category III fee subject. There were 1,272.48 lbs of particulate matter less than 10 microns (PM10) emissions reported for 2016 due to crushing operations. The plant processed 127,248 tons of sand and gravel in 2016. Reported diesel fuel usage was 0 gallons.

Inspection:

Arrived: 2:30 PM

Departed: 3:20 PM

Weather: 48°F, mostly cloudy, wind 5 to 7 MPH @ south

No visible emissions (VEs) were observed and the crushing operation was not operating. No odors were identified surrounding the facility.

A pre-inspection meeting was conducted with Mr. Marks. The purpose of my visit and the status of the plant operations were discussed. They were close to ending operations for the season. Piles of concrete were onsite from crushing operations. For the concrete pipe, the pieces have to be broken up to get the wire out of the pipe and then crushed. Asphalt was also being crushed. They were getting the asphalt from their own projects and taking some from the City of Durand. The crushed material was being sold for reuse. The plant produces two types of material sizes: 1" x 3" and 21A gravel.

Equipment On-Site and Company IDs:

Device ID and Description	Make and model (# on equipment)	serial # (# on equipment)	Max. rated capacity (ton/hr)	Notes / Subpart OOO tested
Impactor1 - Impact Crusher	KPI-JCI FT5260	414059	350	Mf. Date 2014 / Tested 9-15-14
6 x 20 Screen - Screen	KPI-JCI FT6X20300-3 (FT6203CC)	T130212 (S133091)	350	Mf. Date 2014 / Tested 9-15-14
MCB 63 x105 - Portable Conveyor	McCluskey Bros 36 x105	11356 (11039)	350	Mf. Date 2000 / Tested 5-22-06

The process was not operating during the inspection. Equipment was moving around on-site, moving piles of material in preparation for crushing next week.

Visible Emission (VE) Limits

Special Condition (SC) 1.2 contains visible emission limits for crushers, screens, conveyors, material storage piles, and truck traffic. The process was not operating during the inspection so VEs could not be evaluated. There were no VEs from the piles of crushed materials and truck traffic.

Material Processing

In SC 1.3, the permit limits material throughput to 2,000,000 tons per year per site. The plant operates well below the material throughput limit.

For SC 1.5, no asbestos containing materials shall be crushed. The operators are trained to identify asbestos so that no asbestos containing materials are accidentally crushed.

Process/Operational Limits

For SC 1.6, the program for continuous fugitive emissions control in Appendix A of GPTI 99-14 must be followed in order to operate the crushing plant. The facility has a program for fugitive dust control in place. There are two water trucks on-site. One is equipped with spray bars to put water on the roads and the other is a tanker that is connected to provide water to the spray bars on the crusher and screen. Everything was very wet due to rains earlier in the week, and the gravel roads were saturated and very muddy.

Equipment

For SC 1.7, each crusher and screen is required to have water spray equipped (or bag house). Water spray was installed on the crusher and screen as required. Water is provided to the equipment from a water tanker truck as there is no water readily available on-site. Water spray was not installed on the portable conveyor nor is it required. However, it is listed on the process information form as having water spray for control.

Testing

SC 1.8 requires verification of visible emissions from 40 CFR 60, Subpart OOO subject equipment. See the table above for equipment that has been tested and when.

Recordkeeping (Monitoring)

SC 1.9 requires daily and annual records of material processed. A copy of the operating record from 06-26-2017 to 10-06-2017 was provided. Crushed materials were concrete and asphalt. The amount of material produced is measured daily. The highest amount of concrete crushed in a day was 1250 tons and the highest amount of asphalt crushed in a day was 2500 tons.

Records are attached but to summarize by the month:

June – 815 tons of concrete

July – 12,164 tons of concrete

August – 23,750 tons of concrete

September – 12,805 tons of concrete

October (to date) – 6,221 tons of asphalt

The records were kept in a satisfactory manner.

Permit Dates

SC 1.11 requires that equipment be labeled with company IDs. All equipment was kind of labeled. Some numbers on the equipment did not exactly match the process information form for GPTI 99-14. (See table above.)

Miscellaneous/Allowed Modification

The notice of intent to relocate per the requirements of SC 1.13b was received on 6-15-2017 listing the date that the plant is to be located at the site as 6-19-2017. Notification is required to be sent to the district office not less than 10 days prior to the relocation. Notification was provided a little short of the requirements. Records show that crushing was not started on-site until 6-26-2017.

For SC 1.13c, a minimum of 500 feet from a residential or commercial establishment is required. The closest residence is located approximately 500 feet to the south of where the crushing plant could be located on-site. The crusher was located even farther away than that on the day of my visit.

Summary:

The facility appeared to be in compliance with all applicable air quality rules and regulations, and GPTI 99-14.



Image 1(1) : Impactor1 - crusher



Image 2(4) : Screen



Image 3(6) : Portable conveyor

NAME Johel Brown

DATE 11/7/17

SUPERVISOR B. M.