

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

N806655090

FACILITY: CARL SCHLEGEL INC		SRN / ID: N8066
LOCATION: 9464 West M-21, OVID		DISTRICT: Lansing
CITY: OVID		COUNTY: SHIAWASSEE
CONTACT: Mark Schlegel , Co-owner		ACTIVITY DATE: 09/10/2020
STAFF: Julie Brunner	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled compliance inspection of portable crusher equipment on PTI 187-08		
RESOLVED COMPLAINTS:		

On September 10, 2020, I conducted a scheduled inspection of Carl Schlegel, Inc. portable non-metallic mineral crushing plant located at the Island Road Pit, 7300 Island Road, St. Johns, Michigan 48879. This crushing plant was last inspected on June 21, 2013 when it was located at the Ovid Pit off of M-21.

Arrived: 8:20 AM
Departed: 9:08 AM
Weather: 54°F, N 7 MPH, UV Index 0

No visible emissions (VEs) were observed from any of the facility operations upon arrival. No odors were identified surrounding the facility.

Facility Contact:

Mr. Mark Schlegel, Member, 517-487-5961, markc@schlegelsand.com

Facility Description:

Carl Schlegel, Inc. owns and operates a portable non-metallic mineral crushing plant on General Permit to Install (GPTI) No. 187-08 (N8066). The non-metallic mineral crushing plant commenced operation in 2008. It was located at the Ovid Pit which has been mined out for sand and gravel, and has been relocated to the Island Road Pit in St. Johns. The plant is powered by a diesel fuel-fired generator. This crushing plant last operated in the fall of 2019.

The surrounding area is rural with some residential mixed in.

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.

§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. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart.

Some of the equipment permitted on GPTI 187-08 is subject to the requirements of 40 CFR 60, Subpart OOO, but it is not indicated on the GPTI Application form that the equipment has been tested. An affected facility is capable of processing greater than 150 tons per hour, and each piece of equipment constructed after August 31, 1983 in order to be subject to the standard. None of the equipment located at the Island Road Pit is subject to the NSPS because it is either not capable of processing greater than 150 tons per hour or was constructed prior to August 31, 1983.

Additional Exempt Equipment:

Conveyors, screens, etc. – Installed and operating pursuant to Rule 285(2)(t), equipment for the mining, loading, unloading, and screening of uncrushed sand, gravel, soil, and other inorganic soil-like materials. This equipment was operating during the inspection in the Pit.

Diesel fuel-fired generator – Installed and operating pursuant to Rule 285(2)(g) for internal combustion engines that have less than 10,000,000 Btu/hour maximum heat input.

Diesel fuel tank – less than 300 gallons and exempt per Rule 284(2)(d).

Michigan Air Emissions Reporting System (MAERS):

The facility is a regulated facility, subject to 40 CFR 60, Subpart OOO which requires reporting to MAERS. For 2018, 9300 yards (12,555 tons) of stone was produced with a reported 168.05 lbs of PM10 and 42.5 lbs of PM2.5.

Inspection:

I was met on-site by Mr. Mark Schlegel. (His office is located in Lansing.) The purpose of my visit and the status of the facility operations were discussed. The Ovid Pit where this crusher was located is closed. The crushing plant was moved from Ovid to the Island Rd Pit sometime in 2018.

The roads were well watered (wet) upon my arrival. The crusher on GPTI 187-08 was not operating. Due to high water levels, the generator had gotten wet. It will need to go in for service/repair before it can be operated again. Mark estimates that the crusher plant will not be operated this fall. The crusher produces 22A road gravel.

An updated process information (EQP5756) form was provided and only four (4) pieces of equipment were moved to the Island Road Pit:

CR003 – AC 436 cone crusher; Serial No. B10230; 150 ton/hr; Mf. Date 1975 / Water spray not installed / Not NSPS subject

C143 – 100' x 36' conveyor; Shop built; 150 ton/hr; Mf. Date pre-1983 / Not NSPS subject

PS001 – Screen/feeder; PowerScreen Chieftain 1800, Serial No. 120 00 856; 150 ton/hr; Mf. Date ~1990 / Not NSPS subject. New process equipment.

C108 – 63' x 24' conveyor; Shop built; 150 ton/hr; Mf. Date pre-1983 / Not NSPS subject. New process equipment.

There is more equipment associated with the crushing plant detailed on the EQP5756 form submitted in 2012 to modify GPTI 187-08. A modification of the GPTI will be submitted for the equipment that is currently on-site but not in the GPTI process information. A copy of the process information was received during the inspection. See attached information for the modification to the GPTI.

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 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 plant processes virgin material that does not contain asbestos.

Process/Operational Limits:

For SC 1.6, the program for continuous fugitive emissions control in Appendix A of GPTI 187-08 must be followed in order to operate the crushing plant. The facility has a program for fugitive dust control in place. Everything was wet, and the gravel roads were saturated due to rains this past week. Water is available on-site. The records of water application or dust control agents were not requested but need to be kept.

Equipment:

For SC 1.7, each crusher and screen is required to have water spray equipped (or bag house). Water spray was not installed on the crusher and screen at the time of the inspection. Water spray was installed on the crusher and screen by the 3rd week of September. Pictures located: S:\@District Facilities\N8066\Site

Pictures\Inspection 9-10-2020\Water Spray on AC 436 Crusher.msg. Water is provided to the equipment from on-site sources. The dirt and sand processed is about 30% gravel and there is a lot of natural moisture, but water spray still needs to be installed per the permit requirements.

Testing:

SC 1.8 requires verification of visible emissions from 40 CFR 60, Subpart OOO subject equipment 60 days after achieving maximum production but not later than 180 days after initial startup. NA

Recordkeeping (Monitoring):

SC 1.9 requires daily and annual records of material processed. Daily records of material processed were not being kept. Mark estimated MAERs emissions using material sold records and back calculating. Mark will get with the plant operator and get the daily recording keeping instituted for the next time the plant operates.

Records were requested and obtained for 2018 and 2019. The facility processed 31,003 yards (~41,850 tons) of stone in 2019. This was a higher production year in 2019 than in 2018 when the plant was first moved to the Island Road Pit.

The owner/operator now knows that daily and better annual records of material processed are needed. The records obtained for this inspection are attached.

Permit Dates:

SC 1.11 requires that equipment be labeled with company IDs. Equipment was labeled. Some equipment did not match the process information form for GPTI 187-08 and some needed to be added to the plant. (See above.)

Miscellaneous/Allowed Modification:

The notice of intent to relocate per the requirements of SC 1.13b was not submitted in 2018 when the plant was moved from Ovid Pit location. Notification is required to be sent to the district office not less than 10 days prior to the relocation. The notification was received with the inspection and is attached.

For SC 1.13c, a minimum of 500 feet from a residential or commercial establishment is required. The closest residence is located approximately 600 feet to the northeast of where the crushing plant is located on-site.

Fugitive Dust Control Plan – Appendix A

When I was out walking around the pit, the roads were not dusty. Dust suppressants used includes water and chloride. Records of dust suppressants on roadway and yard were not requested but need to be kept.

Summary:

The owner/operator of the facility is addressing the recordkeeping shortcomings, and submitted a modification to update the equipment list on the GPTI. The hardcopy of the permit modification and relocation form will be mailed to the Permit Section.



Image 1(1) : Crushing plant GPTI 187-08

NAME Julie L. Brunner

DATE 9/15/2020

SUPERVISOR B.M.