

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

P062332508

FACILITY: FUOSS GRAVEL COMPANY		SRN / ID: P0623
LOCATION: 777 BUSH RD, OWOSSO		DISTRICT: Lansing
CITY: OWOSSO		COUNTY: SHIAWASSEE
CONTACT: James Fuoss , Owner		ACTIVITY DATE: 12/08/2015
STAFF: Julie Brunner	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled inspection of Fuoss Gravel Company for compliance with a general permit and review operation of a used oil furnace. It was also a multi-media inspection with Water Division staff.		
RESOLVED COMPLAINTS:		

On December 8, 2015, the Department of Environmental Quality (DEQ) conducted a multi-media inspection of Fuoss Gravel Company. DEQ staff included Air Quality Division (AQD) staff: Julie Brunner and Nathan Hude, and Water Division staff: Brent Bodnar, Christopher Clampitt, and Susan Doty. The AQD inspection was scheduled and the timing was coordinated with Water staff. The Water staff were following up on numerous water violations and to determine when the facility was going to shut down. The facility has responded to the water violations indicating that operations would cease by December 31, 2015, but closure plans are unclear.

Facility Participants:

Mr. Jim Fuoss, President, 989-725-2084

Mr. Mark Hanna, Attorney at Law, 989-725-8006, mark@mahannacorp.com

Facility Description:

This facility is a family owned gravel pit that sells sand and gravel products to contractors and the general public. Fuoss Gravel Company has two pits. One is located at 777 Busha Road which has the business office and the water violations, and the other pit is located off Grand River.

The facility is located in Owosso Township in a mainly rural area with some residential house located along main roads.

Fuoss Gravel Company (P0623) is a minor source due to the potential to emit of less than 250 tons per year (tpy) of any regulated air contaminant. The facility is considered minor for emissions of hazardous air pollutants (HAPs) with a potential to emit less than 10 tpy of any single HAP and 25 tpy of aggregate HAPs. The facility is not subject to the Title V - Renewable Operating Permit Program

One crushing plant is permitted under Permit to Install (PTI) 126-15 which is a general permit for nonmetallic mineral crushing.

The facility does not currently report to the Michigan Air Emission Reporting System (MAERS).

Arrival:

DEQ staff arrived at approximately 10:00 AM. No visible emissions were observed from any of the facility operations. A portable crusher was operating at the time of arrival not far from the office.

A pre-inspection meeting was conducted with Mr. Jim Fuoss (owner/operator) and Mr. Mark Hanna, his attorney. The facility operations were discussed, and the water and air issues surrounding facility operations. Staff only inspected the Busha Road facility, but also collected information on the Grand River operations.

A facility tour was then taken starting with the shop where the used oil burner is located.

Work Shop:

The work shop has three (3) space heaters: propane-fired, wood-fired, and oil-fired. The oil-fired heater was not operating at the time of the inspection.

Used oil furnace (pictures taken)

Horizon 200: 200,000 Btu/hr heat input, maximum of 1.43 gallons per hour of No.2 fuel oil

Installation date of furnace: ~2005 (10 – 11 years ago)

Test date on tag: Nov. 1991

Amount of oil used is ~1000 gallons per season. (A season is from November to March.)

Operating hours: 8 hours per day, 5 days per week

Used oil tank: ~500 to 600 gallons, no secondary containment

Maintenance: Furnace is cleaned once a month

Exhaust stack: cement block, vents vertically out the building roof at ~30 feet. The wood-burning heater is also vented out of this stack

The source of used oil for the furnace is approximately 500 gallons of used oil is generated on-site. Approximately 500 gallons of used oil is generated off-site and picked up by Fuoss personnel. Zmitko Farms gives the used oil to Fuoss.

There is another used oil furnace at the Grand River pit. The specifics were requested for this furnace but not received prior to finishing this report.

The requirements of exemption Rule 282(iv) are not being met due to the combustion of off-site used oil. Rule 282(iv) states "Waste oil or used oil fuels which are generated on the geographical site and the equipment has a rated heat input capacity of not more than 500,000 Btu per hour."

Neither furnace is operating as exempt. Two options for compliance were explained. A PTI can be obtained for the furnaces that allow the combustion of off-site used oil. Or, the combustion of off-site used oil can be ceased for compliance with Rule 282(iv).

Production of sand and gravel:

The operations include mining, screening, washing and crushing of materials. Rule 285(t) exempts equipment for the mining and screening of uncrushed sand, gravel, soil and other inorganic soil-like materials.

Crushing - Two (2) crushing plants at the Busha Road pit and one (1) crushing plant at the Grand River pit.

After an AQD inspection on 6/17/2015, a general permit was obtained for one crushing plant at the Busha Road pit. No other crushers were identified at the time as being at the facility.

A total of three (3) crushing plants were identified by Mr. Jim Fuoss as being part of his operations. Upon arrival, a crusher was operating near to the office. No visible emission exceedances were identified. This crushing plant was not the permitted crushing plant. The crusher was identified as a Cedar-Rapids 575 Commander by the Iowa Manufacturing Company with a conveyor. (Pictures taken) The crusher is a roll crusher and portable. It currently does not have water spray. The date on the crusher was ~1978 and serial numbers for the equipment could not be identified. The max capacity of the plant is ~ 100 yards per hour (~150 tons/hour) and when new, it was capable of doing three times that according to Jim. The equipment is powered by a diesel engine that sits beside the plant. Approximately 30 to 40 yards (45 to 60 tons) of gravel had been produced in the hour that it had been operating so far. A large pile of bricks was near and according to the operator, had not been touched in years.

The crushing plant that is permitted on general permit, PTI 126-15 was visited next. The equipment for this plant was in pieces and the one of the crushers was broken down. Jim stated that he has plans to sell this equipment. The crushing plant includes an Allis Chalmers 9-45 Hydrocone cone crusher with the number 17-00157-02 on the base (Serial No. B58841, date of manufacture 1980, capacity 125 ton/hr), a Wisconsin Foundry 18-38 jaw crusher (Serial No. HAC43-A, date of manufacture unknown) and associated conveyors. The old anhydrous ammonia tank that is used as the water mist supply tank has been removed. (It is currently being used to hold hypochlorite for dust control on the roads.) Since the plant is not currently operational (and in pieces), compliance could not be determined. Records were requested for the daily and annual (since the permit was issued on July 8, 2015) amount of material processed for the permitted equipment.

The equipment at the Grand River pit was not viewed. Jim stated that this equipment has a primary crusher dating back to the 1940s and a cone crusher dating back to somewhere in the 1960 to 1970s. The cone crusher is an Allis Chalmers 6-45 Hydrocone with a capacity between 125 to 150 tons/hr. Water spray is not installed on the equipment but could be installed.

Departure:

Violations were identified at the time of inspection. Records not obtained during the inspection were to be sent. DEQ staff departed the facility at approximately 12:50 PM.

Records Review:

Mr. Hanna emailed copies of the crusher production for crushed stone, process 23A, recycled asphalt, and 0-1" concrete for both the Busha and Grand River pits for the 2015 year to date.

Month	Busha Pit (Tons)	Grand River Pit (Tons)
Jan-15	0	0
Feb-15	0	0
Mar-15	0	0
Apr-15	341	1,014
May-15	394	2,034
Jun-15	148	1,339
Jul-15	233	1,285
Aug-15	437	1,344
Sept-15	861	1,214
Oct-15	734	416
Nov-15	430	555
Dec-15	578	0

Total: 4,156 9,201

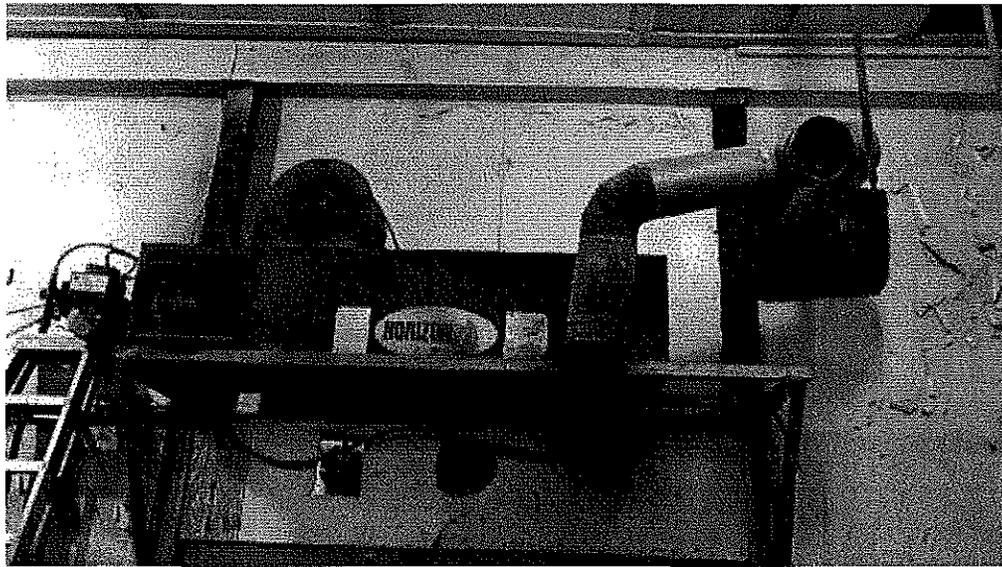
Records will need to be kept for each crusher separately for daily and annual production on a 12-month rolling time period.

Summary:

Instances of noncompliance with Rule 201 and/or exemption rules were identified with this inspection. A violation notice (VN) was sent on December 10, 2015.

Regarding the state registration number (SRN), generally each portable crusher is assigned a separate SRN. Since the crushers probably won't move (much), the gravel pit, two crushers, and used oil furnace at Busha Road will use P0623. The Grand River gravel pit, crusher, and used oil furnace will be assigned a new SRN.

New Source Performance Standard (NSPS), 40 CFR 60, Subpart OOO for Nonmetallic Mineral Crushing Plans does not apply to a crusher if the maximum capacity is less than 150 tons per hour (40 CFR 60.670(b)(2)). If a crusher is NSPS subject, then MAERS reporting will be required. General permit applications for the two unpermitted crushers were submitted on December 14, 2015.



**Image 1(Used oil furnace) :** Used oil furnace at Busha Road

NAME Julie L. Brown DATE 12/16/15 SUPERVISOR B.M.