

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

P006069164

FACILITY: Cross Excavating & Demolition		SRN / ID: P0060
LOCATION: 52071 M-51 N, DOWAGIAC		DISTRICT: Kalamazoo
CITY: DOWAGIAC		COUNTY: CASS
CONTACT: Russell Cross , Owner		ACTIVITY DATE: 09/01/2023
STAFF: Rachel Benaway	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: On-site inspection to verify compliance with PTI #31-10 and all state and federal air use regulations.		
RESOLVED COMPLAINTS:		

AQD staff (Rachel Benaway and Jared Edgerton) completed an unannounced air quality inspection of Cross Excavating & Demolition (SRN P0060), a nonmetallic mineral crushing facility located in Dowagiac, MI, on 9/1/2023. The purpose of this inspection was not only to verify Cross Excavating is in compliance with their Permit to Install (PTI) #31-10 and all state and federal air use regulations, but also in response to a complaint received on 7/17/2023 regarding fugitive dust emitted from the facility. Cross Excavating is considered a minor source of particulate matter (PM) emissions. The facility is not subject to any New Source Performance Standards (NSPS) or National Emission Standards for Hazardous Air Pollutants (NESHAP). The last inspection was completed at the facility on 7/18/2016. Russell Cross is the owner of the facility, responsible for submitting requested records, and was present for the on-site inspection. Personal protection equipment includes safety glasses and safety shoes.

The facility operates employs approximately 5 people and operates in a sporadic manner, mostly for three weeks in spring and a few weeks in the summertime. The township restricts operating hours to between 8:00 am and 5:00 pm. Materials crushed here consist mostly of local demolition materials. There are no parts washers, boilers, or emergency generators on site.

#	Equipment at Facility
2	Crushers (McCloskey #626, Cedar Rapids #102B)
3	Screens (McCloskey #627, Cedar Rapids #101A, Tesab Roto Screen #643)
4	Conveyors (#C-1, C-2, X70T, Vickwest #345)
	Backhoe
	Front loader

A notification was submitted to the Department on 7/17/2023 regarding the installation of a new screen (#643). At the time of this inspection, the #102-B crusher and #101A screen were out of service, located off to the side of the production area, and have not been used since last spring. They are mostly used as portable units at other locations. The facility was not operating during this inspection.

The following is a summary of information obtained from the on-site inspection and the submittal of requested records. Where applicable, compliance determinations are indicated for each special condition established in the PTI, organized by emission unit or flexible group.

FGCRUSHING

A nonmetallic mineral crushing facility consisting of crusher(s) and associated process equipment including grinding mills, drills, screening operations, bucket elevators, belt conveyors, loading and bagging operations, storage bins, enclosed truck or railcar loading stations and any other material handling equipment operated at the site. Each crusher and screen shall be equipped with a water spray. A baghouse dust collector may alternatively be installed in lieu of water spray for any particular piece of equipment. Operation of the control equipment is required only when necessary to meet applicable emission limits.

SC	Condition	COMPLIANT?
1.1	The particulate matter (PM) emissions from each baghouse dust collector portion of FGCRUSHING shall not exceed 0.04 pound per 1,000 pounds of exhaust gases, calculated on a dry gas basis. Comment: The facility does not have a baghouse for PM control.	NA
1.2	Visible emissions from FGCRUSHING shall not exceed the limits in the following table:	
	Equipment	Opacity Limit %
1.2a	Equipment enclosed within a building	No Visible Emissions
1.2b	All crushers	15

1.2c	Screens	10	NA
1.2d	Rock drills	5	
1.2e	Conveyors/Transfer points	10	
1.2f	Wash screens and all subsequent equipment downstream up to the next crusher or storage bin	No Visible Emissions	
1.2g	All equipment controlled by a baghouse dust collector	7	
1.2h	Wheel loaders and truck traffic	5	
1.2i	Material storage piles	5	
1.2j	Any other process equipment which is part of the nonmetallic mineral crushing facility or related processes	10	
Comment: The facility was not in operation during this inspection.			
1.3	Permittee shall not process more than 2,000,000 tons of any non-metallic mineral through FGCRUSHING per year per site. Comment: Facility submitted daily production records and annual totals demonstrating 6,370 tons processed in 2022 and 3,080 tons processed in 2023 so far.		Yes
1.5	Permittee shall not crush any asbestos tailings or asbestos containing waste materials, as defined by the National Emission Standard for Hazardous Air Pollutants regulations, in FGCRUSHING. Comment: Facility is certified for asbestos removal and reports that the material processed on-site is preemptively screened for asbestos.		Yes
1.6	The permittee shall not operate FGCRUSHING unless the program for continuous fugitive emissions control for all facility roadways, the facility yard, all storage piles, and all material handling operations specified in Appendix A has been implemented and is maintained. Comment: Records of water spray application were submitted for 2022 and 2023 for the concrete and driveway.		Yes
1.7	Each crusher and screen shall be equipped with a water spray. Comment: Although the plant was not in operation, Staff requested a demonstration that the crusher and screens were equipped with water sprays. Staff observed that the crusher #626 had two broken hoses and screen #627 had significantly clogged nozzles. A violation notice was issued since this provided verification of the complaint received by the Department.		NO
1.8	Verify visible emissions rates and particulate emission rates from NSPS subject crushers, screens, transfer points on conveyors, etc., by testing at owner's expense... Comment: No units are subject to the NSPS. All are rated 35 tph.		NA

Monitoring/Recordkeeping:

SC	Condition	COMPLIANT?
1.9	Records of amount of material processed, Daily and Annually Comment: Facility submitted daily production records and annual totals demonstrating 6,370 tons processed in 2022 and 3,080 tons processed in 2023 so far.	Yes
1.10	Notify AQD within 15 days after initial startup of FGCRUSHING, of actual date of startup	Yes
1.11	LABEL all equipment associated with FGCRUSHING within 45 days of startup according to IDs specified on Form EQP5756 Comment: Some of the labels had worn off. Labels were replaced while Staff was on site.	Yes
1.12	Shall not replace or modify any portion of FGCRUSHING including control equipment, unless: a) Update general permit by submitting new Process information Form EQP5756 to Permit Section and District Supervisor, identifying all existing and new or additional equipment added to process a minimum of 10 days BEFORE equipment is replaced or modified. b) Continue to meet all general permit criteria after modification c) Keep records of date and description of replacement or modification d) Notify AQD within 15 days after startup of any new or additional equipment, of the actual date of initial startup e) All new or additional equipment that is subject to NSPS OOO which has not been previously tested, shall comply with testing requirements of the NSPS.	Yes
1.13	Shall not relocate FGCRUSHING to any new geographical site in Michigan unless ALL criteria are met: a) Shall not have any outstanding violations of AQD Pollution Control Rules, orders, permits	

	<p>b) Notice of intent to relocate (EQP5757), copy of original general permit (EQP5727, 5729, and 5756), any process information forms for previous modifications, and a proposed site plan identifying new geographical site and duration at new site shall be provided to district office and permit section not less than 10 days prior to relocation. All residential or commercial establishments and places of public assembly within 1,000 ft of facility site shall be clearly identified on site plan.</p> <p>c) Crushers shall be located a minimum of 500 feet from residential/commercial buildings or places of public assembly.</p> <p>d) Copy of general PTI shall be clearly posted in office or workstation</p> <p>Comment: The facility has been processing materials off-site in Indiana. No notifications are required for out-of-state relocations.</p>	<p>Yes</p>
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A violation notice was issued for the lack of properly operating spray control on all crushers and screens (SC 1.7). The facility will have to respond by describing measures taken to correct the violation before the violation notice can be resolved.

At the time of this inspection the facility was not in compliance with all conditions and requirements of PTI #31-10 and all state and federal air use regulations.

NAME Rachel Fenaway

DATE 9/26/23

SUPERVISOR Monica [Signature]