

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

P101672305

FACILITY: Great Lakes Aggregates, Lippmann Plant		SRN / ID: P1016
LOCATION: 5699 Ready Road, S ROCKWOOD		DISTRICT: Jackson
CITY: S ROCKWOOD		COUNTY: MONROE
CONTACT: Jordan Stol , Manager		ACTIVITY DATE: 06/20/2024
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced inspection while plant was at the former Buick City site in Flint, Genesee County. .		
RESOLVED COMPLAINTS:		

On June 20, 2024, the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), conducted an unannounced inspection of the Great Lakes Aggregates LLC Lippmann Plant while it was visiting the Dan's I-475 Job Site - Buick City, in Flint.

Environmental contact:

- Thomas Downs, General Manager; 734-783-7400; tdowns@greatlakesagg.com
- Jordan Stol, Manager; 586-634-2264; jstol@greatlakesagg.com
- Blake Beddow, Project Manager, Impact Compliance & Testing, Inc. (consultant); 734-464-3880; blake.beddow@impactcandt.com

EGLE, AQD contact:

Dan McGeen, inspector; 517-648-7547; mcgeend@michigan.gov

Facility description:

This facility is a portable, non-metallic mineral processing plant.

Emission units:

No emission units* are listed in General PTI 66-19, but the following equipment is listed in the General PTI 66-19 application submitted in a recent relocation notice:

- Jaw crusher, Device ID: P-1
- Impact crusher, Device ID: P-2
- Screen, Deister TFM3—2724-XH 76' X 20', Device ID: S-1
- Trailer conveyor, Device ID: C-1
- Middle conveyor, Device ID: C-2
- Top conveyor, Device ID: C-3
- PRSC conveyor, Device ID: C-4
- Telestacker conveyor, Device ID C-5
- Portable conveyor, Device ID: C-6
- Portable conveyor, Device ID: C-7
- Recycle conveyor, Device ID: C-8
- Rear discharge conveyor, Device ID: C-9

*An *emission unit* is any part of a stationary source that emits or has the potential to emit an air contaminant.

Flexible groups:

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Flexible Group** ID	Flexible Group Description	Permit to Install (PTI) No.; Federal Requirements	Compliance Status
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.	General PTI 66-19; 40 CFR Part 60, Subpart 000	Compliance

**** A flexible group is used in a permit to install (PTI) or Renewable Operating Permit (ROP) to combine two or more emission units that have common or identical requirements.**

Regulatory overview:

This facility is considered a minor source of criteria pollutants, that is, those pollutants for which a National Ambient Air Quality Standard (NAAQS) exist. These include carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds (VOCs), lead, particulate matter smaller than 10 microns (PM10), and particulate matter smaller than 2.5 microns (PM2.5). A major source of criteria pollutants has the potential to emit (PTE) of 100 tons per year (TPY) or more of any one of the criteria pollutants, and would be subject to the Renewable Operating Permit program.

This facility is also considered to be a minor or area source for hazardous air Pollutants (HAPs), because it has a PTE of less than 10 TPY for any single HAP and less than 25 TPY for all HAPs combined.

This facility is subject to 40 CFR Part 60, Subpart 000 - Standards of Performance for Nonmetallic Mineral Processing Plants, as the crushers, screen, and conveyors are each rated at 500 tons per hour (TPH) maximum capacity, above the 150 TPH threshold for being subject.

Note: This New Source Performance Standard (NSPS) was updated in 2008. Table 3 to Subpart 000 sets a 12% opacity limit for affected facilities (as defined in Section 60.670 and 60.671 that commenced construction, modification, or reconstruction on or after 4/22/2008.

Fee status:

This facility is considered a Category D fee-subject source, because it is subject to a NSPS, specifically 40 CFR Part 60, Subpart 000.

The facility submits an annual air emission report each year to MiEnviro, and to its predecessor, the Michigan Air Emission Reporting System.

Location:

- Address: 1088 E. Stewart Avenue, Flint, 48505, Genesee County.
- Description: The Dan's I-475 Job Site - Buick City was located within the Revitalizing Auto Communities Environmental Response (RACER) site formerly known as Buick City, State Registration Number A1178. To the north, west, and south were portions of the RACER site. To the immediate east were railroad tracks and other industrial sites. The plant was predicted to be there from 5/16 to 7/16/2024, per the 5/10 relocation notice received by mail on 5/21.

Recent testing:

The plant passed its NSPS-required visible emission testing on 6/12/2019.

Safety attire required:

For being around any crusher, the AQD staff should wear safety glasses with side shields, hard hat, high visibility safety vest, and steel-toed boots, and should bring hearing protection, in case it is needed.

Arrival:

This was an unannounced inspection. AQD was represented by Dan McGeen, inspector.

- Arrival time at RACER site: 10:57 AM.
- Visible emissions: None detected.
- Weather conditions: Partly sunny, 82 degrees F, and humid, with winds out of the north at 0-5 mph.
- Arrival at crusher location within RACER site: 11:00 AM.

The concrete roadway into the site was mostly dry, but there were standing puddles of water in low lying areas from localized heavy rain a few hours prior. No fugitive dust was observed.

At the crusher site, D. McGeen met with an operator, James, as Foreman Mike Ulmer was not available. D. McGeen had provided credentials to M. Ulmer while visiting this site 8 days earlier, when the plant was undergoing a belt replacement. Today's visit was for a routine inspection, D. McGeen explained.

Inspection:

The plant was running. There was no fugitive dust from the jaw crusher (primary crusher) or impactor (secondary crusher), and water sprays were in use. The screen process shared the same chassis as the secondary crusher. Please see attached photos:

1. IMG_1065.JPG: Secondary crusher at left and primary crusher at right with 0% opacity.
2. IMG_1066.JPG: Secondary crusher, with 0% opacity.

3. IMG_1067.JPG: Primary crusher with intermittent opacity of 0-5%, under steel beam just to right of center.

The company's water truck watered the yard area and roadways, during the inspection.

Compliance check with Special Conditions (SC) of General PTI 66-19:

General PTI 66-19 SC	Requirement	Comments	Complies?
FGCRUSHING, SC I.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.	NA	NA
FGCRUSHING, SC 1.2	Visible emissions from FGCRUSHING shall not exceed the limits in the following table:	Please see below.	See below
FGCRUSHING, SC 1.2a	Any equipment enclosed within a building: No visible emissions.	NA	NA
FGCRUSHING, SC 1.2b	All crushers: 15% opacity.	The facility was meeting this requirement. Opacity was as follows: <ul style="list-style-type: none"> • Jaw crusher: 5%, intermittently. • Impact crusher: 0%. 	Yes
FGCRUSHING, SC 1.2c	Screens: 10% opacity.	The facility was meeting this requirement, at 0% opacity.	Yes
FGCRUSHING, SC 1.2d	Rock drills: 5% opacity.	NA	NA
FGCRUSHING, SC 1.2e	Conveyors/Transfer points: 10% opacity.	The facility was meeting this	Yes

		requirement, at 0% opacity.	
FGCRUSHING, SC 1.2f	Wash screens and all subsequent equipment downstream up to the next crusher or storage bin: No visible emissions.	NA	NA
FGCRUSHING, SC 1.2g	All equipment controlled by a baghouse dust collector: 7% opacity.	NA	NA
FGCRUSHING, SC 1.2h	Wheel loaders and truck traffic: 5% opacity.	The facility was meeting this requirement.	Yes
FGCRUSHING, SC 1.2i	Material storage piles: 5% opacity.	The facility was meeting this requirement.	Yes
FGCRUSHING, SC 1.2j	Any other process equipment which is part of the nonmetallic mineral crushing facility or related processes: 10% opacity.	NA	NA
FGCRUSHING, SC 1.3	The permittee shall not process more than 2,000,000 tons of any non-metallic mineral through FGCRUSHING per year per site.	The facility was meeting this requirement. The final total for this site was 38,408 tons.	Yes
FGCRUSHING, SC 1.4	The annual production limit of 2,000,000 tons per year per site shall not apply if FGCRUSHING is operated at a location that is covered by a site specific air use permit. At such a location, the annual material processed shall be in conjunction with the production limit contained in the permit for that location. All other conditions and restrictions of this permit shall apply when operating at such location.	NA	NA

FGCRUSHING, SC 1.5	The 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.	The facility was meeting this requirement. No suspect materials were observed. The concrete was from I-475 demolition, and not from building demolitions.	Yes
FGCRUSHING, SC 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.	The facility was meeting this requirement.	Yes
FGCRUSHING, SC 1.7	Each crusher and screen shall be equipped with a water spray. A baghouse dust collector may be installed in lieu of water spray for any particular piece of equipment. The control equipment shall be properly operated as necessary to comply with all emission limits.	The crushers were equipped with multiple water sprays, but the screen, which was at 0% opacity, did not have one. D. McGeen advised that the permit requires it to have one. On 7/15/2024, D. McGeen emailed the company a reminder that a water spray needed to be installed on the screen. The company subsequently emailed a photo of a reinstalled water sprayer which was reportedly damaged as of 6/20.	No
FGCRUSHING, SC 1.8	Within 60 days after achieving maximum production rate, but not later than 180 days after initial startup of FGCRUSHING, verification of visible emission rates and particulate emission rates from all NSPS subject crushers, screens, all transfer	The facility met this requirement on 6/12/2019. The test report shows an overall average 0% opacity.	Yes

	<p>points on conveyors, and all other miscellaneous equipment associated with FGCRUSHING and covered by the NSPS Subpart OOO, by testing at owner's expense, in accordance with 40 CFR Part 60 Subparts A and OOO, will be required. No less than 14 days prior to the anticipated test date, visible emission observation procedures must be approved by the District Supervisor. Also, no less than 7 days prior to the anticipated test date, the permittee shall notify the District Supervisor of the test date. If after the anticipated test date has been submitted to the District Supervisor, there is a delay in conducting the test, the permittee shall submit to the District Supervisor notice of the new test date. This notification shall be done a minimum of 3 days prior to the rescheduled test taking place. Verification of visible emissions includes the submittal of a complete report of opacity observations to the AQD within 30 days following the last date of the test.</p>		
<p>FGCRUSHING, SC 1.9</p>	<p>The permittee shall keep, in a satisfactory manner, daily and annual records of the amount of material processed for each site at which the facility operates. All records shall be kept on file for a period of at least five years and made available to the Department upon request.</p>	<p>The facility was meeting this requirement. Great Lakes Aggregate Manager Jordan Stol subsequently reported that on 6/20, the plant ran a total of 8.2 hours and produced 2,150 tons of product.</p>	<p>Yes</p>
<p>FGCRUSHING, SC 1.10</p>	<p>The permittee shall notify the AQD, within 15 days after initial startup of FGCRUSHING, of the actual date of initial startup.</p>	<p>The facility appears to have met this requirement with a relocation notice received in the Jackson District Office</p>	<p>Yes</p>

		on 5/7/2019 indicating that the startup of the new plant was on 5/3.	
FGCRUSHING, SC 1.11	The permittee shall label all equipment associated FGCRUSHING within 45 days of initial start up according to the company IDs specified in the application (Form EQP5756). Labels shall be in a conspicuous location on the equipment.	The facility was meeting this requirement.	Yes
FGCRUSHING, SC 1.12	The permittee shall not replace or modify FGCRUSHING , or any portion of FGCRUSHING , including control equipment, unless all of the following conditions are met:	NA, as no replacements or modifications have reportedly taken place.	NA
FGCRUSHING, SC 1.12a	The permittee shall update the general permit by submitting a new Process Information Form (EQP5756) to the Permit Section and District Supervisor, identifying all existing and new or additional equipment added to the process a minimum of 10 days before the equipment is replaced or modified.	NA.	NA
FGCRUSHING, SC 1.12b	The permittee shall continue to meet all general permit to install applicability criteria after the replacement or modification is complete.	NA.	NA
FGCRUSHING, SC 1.12c	The permittee shall keep records of the date and description of the replacement or modification.	NA.	NA
FGCRUSHING, SC 1.12d	The permittee shall notify the Air Quality Division, within 15 days after startup of any new or additional equipment, of the actual date of initial startup.	NA.	NA
		NA.	NA

FGCRUSHING, SC 1.12e	All new or additional equipment that is subject to the federal NSPS Subpart OOO, which has not been previously tested, shall comply with the testing requirements of the NSPS.		
FGCRUSHING, SC 1.13	The permittee shall not relocate FGCRUSHING to any new geographical site in Michigan unless all the following criteria are met:	Please see below.	See below
FGCRUSHING, SC 1.13a	The facility shall have no outstanding unresolved violations of any of the Michigan Department of Environmental Quality Air Pollution Control rules, orders, or permits; or Federal air quality regulations.	The facility was meeting this requirement.	Yes
FGCRUSHING, SC 1.13b	A notice of intent to relocate (Relocation Notice Form EQP5757); a copy of the original general permit forms (EQP5727, EQP5729 and EQP5756); any Process Information forms for previous modifications; and a proposed site plan identifying the proposed new geographical site and the probable duration at the new site shall be provided to the appropriate district office and the Permit Section not less than 10 days prior to the scheduled relocation. All residential or commercial establishments and places of public assembly within 1,000 feet of the proposed facility site shall be clearly identified on the proposed site plan.	The facility overall met this requirement, except they did not provide the original general permit forms. AQD subsequently emailed to the company and their consultant a copy of the original General PTI 66-19 application forms for their future use.	Yes
FGCRUSHING, SC 1.13c	The crusher(s) shall be located a minimum of 500 feet from any residential or commercial establishment or place of public assembly.	The facility was meeting this requirement, with a setback of over 1,300 feet to the nearest residential and	Yes

		commercial establishments and places of public assembly.	
FGCRUSHING, SC 1.13d	A copy of this general permit and conditions shall be clearly posted in the operator's office or workstation.	The facility was meeting this requirement, with a copy of their air and water permits onsite.	Yes

APPENDIX A

Fugitive Dust Control Plan

Fug. Dust Control Plan SC	Requirement	Comments	Complies?
SC I. Plant	The drop distance at each transfer point throughout the plant shall be reduced to the minimum the equipment can achieve	The facility was meeting this requirement.	Yes
SC II. Truck Traffic	On-site vehicles shall be loaded to prevent their contents from dropping, leaking, blowing or otherwise escaping. This shall be accomplished by loading so that no part of the load shall come in contact within six inches of the top of any sideboard, side panel or tailgate, otherwise, the truck shall be tarped.	The facility was meeting this requirement, as no materials were dropping, leaking, etc.	Yes
SC III. Site Roadways and the Plant Yard	Please see below.	Please see below.	See below
SC III.a	The dust on the site roadways and the plant yard shall be controlled by applications of water, calcium	The facility was meeting this requirement, as a water truck applied	Yes

	chloride or other acceptable and approved fugitive dust control compounds. Applications of dust suppressants shall be done as often as necessary to meet an opacity limit of five percent.	water around the plant and on the unpaved yard areas and paved haul roads while D. McGeen observed.	
SC III.b	All paved roadways and the plant yards shall be swept as needed between applications of dust suppressants.	NA, as the paved roadway and plant yard (unpaved) were being watered on this date.	Yes
SC III.c	Any material spillage on roads shall be cleaned up immediately	NA, as no spillage was observed.	NA
SC III.d	A record of all applications of dust suppressants and roadway and the plant yard sweepings shall be kept on file for the most recent five-year period and be made available to the AQD upon request.	The facility was meeting this requirement. Please see attached Water Suppression Report for the date of 7/22/2024.	Yes
SC IV. Storage Piles	Please see below.	Please see below.	See below
SC IV.a	Stockpiling of all nonmetallic minerals shall be performed to minimize drop distance and control potential dust problems.	The facility was meeting this requirement.	Yes
SC IV.b	Stockpiles shall be watered on an as needed basis in order to meet an opacity limit of five percent. Equipment to apply water or dust suppressant shall be available at the site, or on call for use at the site, within a given operating day.	NA, as the stockpiles did not need to be watered at this time.	NA
SC IV.c	A record of all watering shall be kept on file for the most recent five-year period and be made available to the AQD upon request.	The facility was meeting this requirement. Please see attached Water Suppression Report for the date of 7/22/2024.	Yes

SC V. AQD/EGLE Inspection	Please see below.	Please see below.	See below
SC V.	The provisions and procedures of this plan are subject to adjustment by written notification from the AQD, if following an inspection, the AQD finds the fugitive dust requirements and/or the permitted opacity limits are not being met.	NA, as no adjustment as needed.	NA

(End of compliance check.)

Departure:

D. McGeen left the site at 11:37 AM. He noted that the concrete road through the RACER site had been watered following his arrival at the site.

Post-inspection follow up.

- 7/15/2024: The AQD emailed the company to ask questions related to recordkeeping. The AQD reminded the company that the permit requires the screen to be equipped with a water spray, which it did not have on 6/20.
- 7/23/2024: The AQD received an email from J. Stol, including a photo of a water hose with spray attachment suspended above the screening process, spraying a mist downwards. He explained that the water sprayer was damaged on June 20th but had been repaired and reinstalled. The email also included a Water Suppression Report for July 22, 2024 (please see attached).

Compliance concerns:

- The screening process did not have a water spray as required by PTI 66-19, FGCRUSHING, SC 1.7. However, on 7/23/2024, the AQD was emailed a photo from the company showing a reinstalled water hose with spray attachment.

Conclusion:

There were no instances of noncompliance. The only concern was lack of a water spray on the screening process as required by General PTI 66-19. The AQD was subsequently sent a photo of a water spray which had reportedly been damaged on 6/20 but was now reinstalled.



Image 1(001) : Secondary crusher at left and primary crusher at right, with 0% opacity.



Image 2(002) : Secondary crusher, with 0% opacity.



Image 3(003) : Primary crusher, with intermittent opacity of 0-5%, under steel beam just to right of center.

NAME *David R. [Signature]*

DATE 8/7/2024

SUPERVISOR *RB*