

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

P102063849

FACILITY: Messina Trucking, Inc.		SRN / ID: P1020
LOCATION: 6386 Auburn Road, SHELBY TWP		DISTRICT: Warren
CITY: SHELBY TWP		COUNTY: MACOMB
CONTACT: Stephen Messina , Manager/VP		ACTIVITY DATE: 07/28/2022
STAFF: Shamim Ahammod	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Conducted a scheduled inspection of Messina Trucking, Inc (SRN: P1020) to determine the company's compliance with the requirements of the federal Clean Air Act and the conditions of Permit to Install (PTI) No. 83-19.		
RESOLVED COMPLAINTS:		

On July 28, 2022, the Michigan Department of Environment, Great Lakes and Energy-Air Quality Division (EGLE-AQD) staff, Joe Jaskowski and I (Shamim Ahammod) conducted a scheduled inspection of Messina Trucking, Inc (SRN: P1020) located at 2218 Juengel Road, Shelby Township, Michigan. The purpose of the inspection was to determine the company's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and the conditions of Permit to Install (PTI) No. 83-19.

Source Description

The source is a portable existing nonmetallic mineral crushing plant (SRN: P1020) located at 2218 Juengel Road in Shelby Township. The source consists of crushers, screens, conveyors, and stackers. The nearest residence is located less than 500 feet from the primary crusher at Messina Trucking. Since the crusher is located less than 500 feet from a residence, the facility did not qualify for a General PTI and was required to obtain a site-specific PTI in order to legally operate per Rule 201.

On July 22, 2019, PTI No. 83-19 was issued to Messina Trucking Inc. located at 2218 Juengel Road, Shelby Township, Michigan.

The facility is in Macomb County which is currently designated by the United States Environmental Protection Agency (USEPA) as a non-attainment area with respect to the 8-hour ozone standard.

Messina Trucking is classified as a minor source of particulate emissions from the plant. Due to the capacity of the crusher, the equipment is subject to NSPS Subpart OOO, thus the applicant must verify the visible emission rates and particulate emission rates covered by Subpart OOO within 60 days of achieving the maximum production rate.

Messina Trucking Inc. is a minor source of particulate emissions and emissions from the plant are controlled by water sprays.

Control Device

Emissions are controlled with water sprays.

Rules and Regulations

Applicable State Rules

Rule 301- Standards for Density of Emissions

The crusher is subject to Rule 301 as it does not meet subrules (2), (3), or (4) of Rule 301 and no request was made for the department to establish an alternate opacity limit. The opacity limits are set in accordance with the NSPS.

Rule 331- Emissions of Particulate Matter

The source is subject to Rule 331 which applies to the emission of particulate matter. As a result, the permittee must make use of their control technology while operating FGCRUSHING.

Applicable Federal Regulations

40 CFR 60 Subpart OOO- NSPS for Nonmetallic Mineral Processing Plants

This source is subject to NSPS Subpart OOO. This requires a one-time opacity test to be performed for each piece of equipment. This also sets opacity limits for the process equipment.

- On May 5, 2021, Messina Trucking has conducted a USEPA Method 9 Visible Emission (VE) Opacity test. More details are explained in SC V.1(Testing/Sampling).

Inspection Arrangement

I prearranged this announced inspection for July 28, 2022. I also requested the record-keeping information before the inspection day. Steve Messina sent me the requested information via email.

Onsite Inspection

On July 28, 2022, Joe Jaskowski and I arrived at the facility and were greeted by Steve Messina, Owner of Messina Trucking, Inc. I introduced myself, provided credentials, and stated the purpose of the inspection. Joe Jaskowski and I walked through the facility.

Process Description

During my inspection, the facility was in operation. The emission units addressed in PTI #83-19 are EUPROCESS, EUTRUCKTRAFFIC, and EUSTORAGE.

EUPROCESS includes a combination of equipment (screens, crushers, feeders, conveyors, etc.) used to reduce larger materials down to smaller sizes, classify and sort materials into various product types, material handling, and transport material to storage areas.

Messina Trucking receives broken concrete from road construction projects. The concrete is loaded into a jaw crusher using a front-end loader. The jaw crusher reduces the size of the concrete by compressing it. Mechanical pressure is applied to the broken concrete using the crusher's two jaws, one jaw is fixed and the other reciprocates. The jaw crusher is powered by electricity from the grid. From the jaw crusher, the rocks produced are conveyed to a double-deck screen. Material smaller than 5/8" in diameter falls to the second deck of the screen and is conveyed to a storage pile as 21AA aggregate. The material between 1" and 3" in diameter is caught up in the first deck of the screen and conveyed to a storage pile as 1" x 3" aggregate. Material larger than 3" in diameter is conveyed to a secondary impact crusher. From the secondary impact crusher, the material is, once again, conveyed to the double deck screen where the process repeats itself until nothing but 21AA aggregate and 1" x 3" aggregate is produced as a final product.

Water and/or calcium chloride is used to control emissions from the crushers, screens, and conveyors. Water and/or calcium chloride are used to control dust from unpaved roads and wet sweeping are used to prevent dust from paved road.

REGULATORY ANALYSIS

Emission Limit

At the time of inspection, I observed the opacity from FGCRUSHING and it appears the opacity from FGCRUSHING was below the opacity limit.

Material Limit

Per SC II.1, The permittee shall not process more than 100,000 tons of material through FGCRUSHING per 12-month rolling time period as determined at the end of each calendar month.

Per SC VI.2, The permittee shall keep monthly records of the amount of material processed through FGCRUSHING. Furthermore, the permittee shall calculate monthly, the yearly throughput rate based upon the most recent 12-month rolling period in a format acceptable to the AQD District Supervisor.

The permittee shall keep records of the amount of material processed on file and make them available to the Department upon request.

Per SC VI.3, The permittee shall keep daily records of the amount of material processed through FGCRUSHING in a format acceptable to the AQD District Supervisor. The permittee shall keep records of the amount of material processed on file and make them available to the Department upon request.

Steve Messina provided the daily and monthly records of the amount of material processed through FGCRUSHING from August 2021 to July 2022. I reviewed the daily, and monthly production records for August 2021 through July 2022.

Month/year	Amount of material processed through FGCRUSHING in a ton
August -2021	2200
Sept. 2021	1677
Oct. 2021	1820
Nov. 2021	1560
Dec. 2021	1067
Jan. 2022	985
Feb. 2022	598
March 2022	1435
April 2022	1560
May 2022	1781
June 2022	1235
July 2022	742
Total	16,610 tons

Per the 12-month rolling time period as determined at the end of each month, the total production of material during the reported period was 16,610 tons (end of July 2022) which is below the limits of 100,000 tons in SC II.1. It can be noted that the permittee has two transfer conveyors. Therefore, the facility needs two belt scales to measure the total production of materials during the operation. However, the permittee has only one belt scale for one transfer conveyor. The facility needs one more belt scale for another transfer conveyor. More details are explained in SC IV.2 (Design and Equipment section).

Per SC II.2, the permittee hasn't crushed any asbestos-containing waste materials in the facility according to the company.

Process/Operational Restrictions

Per SC III.1, 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 B** has been implemented and is maintained.

Per VI.4, The permittee shall not operate FGCRUSHING unless the nuisance minimization plan for fugitive dust for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix A has been implemented and is maintained.

APPENDIX A: Equipment List

Equipment Description	ID Number	Control Device
Pioneer Primary Crusher	2854	Water Spray

Equipment Description	ID Number	Control Device
Grasan Impact Crusher	KR1313E	Water Spray
Grasan Feed Conveyor	3630	Residual Moisture
Grasan Feed Conveyor	65365	Residual Moisture
Grasan Return Conveyor	25305	Residual Moisture
Grasan 2 nd Return Conveyor	36305	Residual Moisture
Grasan Transfer Conveyor	2436B	Residual Moisture
Kolberg Stacker	31-36125	Residual Moisture
Portec Pioneer Conveyor	31-36105	Residual Moisture
Grasan Conveyor	T36255	Residual Moisture
Grasan Conveyor	49485	Residual Moisture
Grasan Conveyor	33485	Residual Moisture
Grasan Conveyor	10030P	Residual Moisture
Finlay Conveyor	3000	Residual Moisture
Finlay Conveyor	3080	Residual Moisture
Grasan Conveyor	55305	Residual Moisture

Per SC VI.5, The permittee shall keep records of all watering/dust suppressant applications for the site roadways, plant yard, and stockpiles as required by Appendix A. The permittee shall keep all records, in a format acceptable to the AQD District Supervisor, on file and make them available to the Department upon request.

- The permittee applies to water and calcium chloride throughout the facility to minimize the fugitive dust for all plant roadways, the plant yard, and all material storage piles.
- From March 2021 through March 2022, I reviewed the records of the dust suppression applied throughout the facility. These records indicate that Messina Trucking applied calcium chloride throughout the facility during the operational period is around two/three times a week.

Design/Equipment Parameters

Per SC IV.1, The permittee shall not operate any portion of FGCRUSHING unless the water sprays for each crusher and each screen are installed, maintained, and operated in a satisfactory manner. I observed, the permittee was continuously spraying water on each crusher during the operational time but did not spray water on each screen. The reason for not spraying water on each screen is the screen does not become dusty, according to Steve Messina. I did not observe any dust from the screen during the operational time.

Per SC IV.2, The permittee shall install and maintain a belt scale(s) on the transfer conveyor(s) portion of FGCRUSHING which continuously shows the daily throughput rate for the conveyor (s).

- The permittee has two transfer conveyors. The material between 1" and 3" in diameter is caught up in the first deck of the screen and conveyed to a storage pile as 1" x 3" aggregate. However, the facility has no belt scale to measure the weight of the 1" x 3" aggregate materials that the facility produced during the operation. This is a violation of the SC IV.2 of PTI NO. 83-19. The permittee is required to install a belt scale on the transfer conveyor portion that carries 1" x 3" aggregate materials.
- Material smaller than 5/8" in diameter falls to the second deck of the screen and is conveyed to a storage pile as 21AA aggregate. On 8/3/2020, the permittee installed a belt scale on the transfer conveyors portion that carries 21AA aggregate materials.

Testing/Sampling

Per SC V.1, on May 5, 2021, the permittee verified the visible emission rate from the following crushers, screens, transfer points on conveyors, and other miscellaneous equipment associated with FGCRUSHING. Fishbeck was hired by Messina Trucking to conduct a USEPA Method 9 visible emission determination for the applicable equipment. Method 9 Visible Emission test results are given below: APPENDIX A: Equipment List

Equipment Description	ID Number	Average Opacity of 6-minute Average
Pioneer Primary Crusher	2854	2.0%
Grasan Impact Crusher	KR1313E	1.1%
Grasan Feed Conveyor	3630	0%
Grasan Feed Conveyor	65365	0%
Grasan Return Conveyor	25305	0%
Grasan 2 nd Return Conveyor	36305	Residual Moisture
Grasan Transfer Conveyor	2436B	0%
Kolberg Stacker	31-36125	0%
Portec Pioneer Conveyor	31-36105	0%
Grasan Conveyor	T36255	Residual Moisture
Grasan Conveyor	49485	0%
Grasan Conveyor	33485	Residual Moisture
Grasan Conveyor	10030P	Residual Moisture
Finlay Conveyor	3000	Residual Moisture
Finlay Conveyor	3080	Residual Moisture
Grasan Conveyor	55305	Residual Moisture
Conveyor	3206	0%

Reporting

Per VII.1, the permittee is required to notify AQD once the equipment is installed in the facility. On May 8, 2019, Robert Joseph, AQD District Inspector sent a violation letter to the facility for installing a nonmetallic crusher without obtaining a permit to install. To resolve the VN, the facility applied for the Permit and AQD issued permit no. 83-19 on July 22, 2019.

OTHER REQUIREMENT(S)

Per SC IX.2, Within 7 days of permit issuance, the permittee shall label all equipment listed in Appendix A with their associated ID Number using a method acceptable to the AQD District Supervisor. Labels shall be in a conspicuous location on the equipment and shall be maintained. During my last inspection on 08/09/2021, I did not see any label on the equipment listed in Appendix A and AQD issued a VN letter for violating the SC IX. 2 of PTI No. 83-19. At this inspection on July 28, 2022, I observed the permittee has labeled the equipment. Therefore, VN will be resolved.

APPENDIX B: Nuisance Minimization Plan

Fugitive Dust

I. Site Roadways / Plant Yard

A. The dust on the site roadways and the plant yard shall be controlled by applications of water, calcium chloride, or other acceptable and approved fugitive dust control compounds. Applications of dust suppressants shall be done as often as necessary to meet all applicable emission limits. A record of all watering/dust suppressant applications shall be kept on file and be made available to the AQD upon request.

B. All paved roadways and the plant yards shall be swept as needed between applications.

C. Any material spillage on roads shall be cleaned up immediately.

At the time of inspection, I did not see dust being generated from the paved roads. Steve Messina provided the record of all watering/dust suppressant applications. From March 2021 to March 2022, I reviewed the records that indicated whether they sprayed calcium chloride or there was rain or snow. It appears that the application of dust suppressants was applied around two/three times per week.

II. Plant

The drop distance at each transfer point shall be reduced to the minimum the equipment can achieve. The transfer point from the re-circulating belt to the feed belt shall be equipped with an enclosed chute.

- At the time of inspection, it seems, that the drop distance at each transfer point was reduced to the minimum the equipment can achieve and the transfer point from the re-circulating belt to the feed belt was equipped with an enclosed chute.

III. Storage Piles

A. Stockpiling of all nonmetallic minerals shall be performed to minimize drop distance and control potential dust problems.

- At the time of inspection, I didn't see any dust being generated from the stockpiling of materials.

B. Stockpiles shall be watered on an as-needed basis in order to meet the opacity limit of 5 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. A record of all watering/dust suppressant applications shall be kept on file and be made available to the AQD upon request.

- More details are explained in the above sections.

IV. 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 6 inches of the top of any sideboard, side panel, or tailgate. Otherwise, the truck shall be tarped.

- According to Steve Messina, on-site vehicles never be overloaded and always truck be tarped. At the time of inspection, I did not see any trucks being loaded.

Violation Notice issued

- On 6/3/2021, AQD issued a VN to the facility for generating fugitive dust from Messina Trucking's parking lots nearby the facility office at 6386 Auburn Road, Shelby Township, MI 48317. AQD received the VN response letter on 6/16/2021. After that, AQD did not receive any more complaints as of September 15, 2022.

Based on an onsite inspection, review of records, and discussion with the facility's staff, the facility appears to be in non-compliance with SC IV.2 of PTI No. 83-19.

NAME Shamim Ahammod

DATE 22 August 2022

SUPERVISOR *K. Kelly*