

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

P102059748

<b>FACILITY:</b> Messina Trucking, Inc.		<b>SRN / ID:</b> P1020
<b>LOCATION:</b> 6386 Auburn Road, SHELBY TWP		<b>DISTRICT:</b> Warren
<b>CITY:</b> SHELBY TWP		<b>COUNTY:</b> MACOMB
<b>CONTACT:</b> Stephen Messina , Manager/VP		<b>ACTIVITY DATE:</b> 08/09/2021
<b>STAFF:</b> Shamim Ahammod	<b>COMPLIANCE STATUS:</b> Non Compliance	<b>SOURCE CLASS:</b> MINOR
<b>SUBJECT:</b> Conducted a scheduled on-site inspection of Messina Trucking,		
<b>RESOLVED COMPLAINTS:</b>		

**On August 9, 2021, the Michigan Department of Environment, Great Lakes and Energy-Air Quality Division (EGLE-AQD) staff, 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.**

### Violation Notice

On 6/3/2021, AQD issued a VN to the facility for generating fugitive dust from the Messina Trucking's parking lots nearby the facility office. AQD received the VN response letter on 6/16/2021. On 6/3/2021, the permittee did spread asphalt millings on the county road and gravel parking lots. The permittee also applied calcium chloride to the spots. I reviewed the record of the dust suppression applied to Messina Trucking's parking lots nearby the facility office from 8/10/2020 to 7/27/2021. It appears the permittee applies the dust suppression to the parking lots around two/three time per week. AQD did not receive any more complaints as of September 1, 2021.

On 8/24/2020, AQD issued a VN to the facility for not installing belt scale, verifying the visible emissions and keeping daily records of the amount of material processed through the equipment. AQD received VN response letter on 9/3/2020. At this inspection time, I observed the permittee has installed the belt scale. On 8/3/2020, the permittee has installed a belt scale on the transfer conveyors portion of FGCCRUSHING. On May 5, 2021, the permittee has verified the visible emission rate from all crushers, screens, all transfer points on conveyors, and all other miscellaneous equipment associated with FGCRUSHING. The permittee started keeping records from August 2020. I reviewed the daily, and monthly production records for August 2020 through July 2021.

### 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 of 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 the Messina Trucking Inc. located at 2218 Juengel Road, Shelby Township, Michigan.

The facility is in Macomb County. Macomb County 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 and 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.

## **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.

### **Inspection Arrangement**

Due to the COVID-19 pandemic, I prearranged this announced inspection on August 9, 2021. I also requested the record-keeping information before the inspection day to reduce the inspection time. Mr. Messina sent me the requested information via email.

### **Onsite Inspection**

On August 9, 2021, I arrived at the facility and was greeted by Mr. Stephen Messina, Owner of the Messina Trucking, Inc. I introduced myself, provided credentials, and stated the purpose of the inspection. 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 transporting of 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. 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 is used to control emissions from the crushers,

screens, and conveyors. Water and calcium chloride are used to control dust from the unpaved roads and wet sweeping are used to prevent/control 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.

Mr. Messina provided the daily and monthly records of the amount of material processed through FGCRUSHING from August 2020 to July 2021. The permittee does not have any records prior to August 2020. Based on last inspection on July 15, 2020, a violation notice was issued for not keeping the daily and monthly records of the amount of material processed through FGCRUSHING. The permittee started keeping records from August 2020.

I reviewed the daily, and monthly production records for August 2020 through July 2021. The highest reported 12-month total production of material during the reported period was 21,500 tons (end of July 2021) which is below the limits of 100,000 tons in SC II.1.

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
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 <sup>nd</sup> Return Conveyor	36305	Residual Moisture
Grasan Transfer Conveyor	2436B	Residual Moisture
Kolberg Stacker	31-36125	Residual Moisture
Portec Pioneer Conveyor	31-36105	Residual Moisture

Equipment Description	ID Number	Control Device
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 August 2020 through July 2021, I reviewed the records of the dust suppression applied throughout the facility. These records indicate the Messina Trucking applied calcium chloride throughout the facility 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. The permittee sprays water on each crusher during the operational time but does not spray water on each screen. The reason for not spraying water on each screen is the screen is not become dusty, according to Mr. Messina.

Per SC IV.2 on 8/3/2020, the permittee has installed a belt scale on the transfer conveyors portion of FGCCRUSHING.

### Testing/Sampling

Per SC V.1, on May 5, 2021, the permittee has 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.

According to their summary reports, 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 <sup>nd</sup> 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

Equipment Description	ID Number	Average Opacity of 6-minute Average
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. 83-10 on July 22, 2019. AQD knows that the permittee has installed the equipment in the facility.

### 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 inspection, I did not see any label on equipment listed in Appendix A. I recommended Mr. Messina to label the equipment. AQD will issue a VN letter for violatin the SC IX.2of PTI No. 83-19.

### APPENDIX A: Equipment List

Equipment Description	ID Number	Control Device
Pioneer Primary Crusher	2854	Water Spray
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 <sup>nd</sup> 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

## 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. Mr. Messina provided the record of all watering/dust suppressant applications. From August 2020 to July 2021, I reviewed the records that indicated whether they sprayed calcium chloride or there was a 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, 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 side board, side panel or tailgate. Otherwise, the truck shall be tarped.

- According to Mr. 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.

Based on an onsite inspection, review of records, and discussion with the facility's staff, the facility appears to be in non-compliance with the SC IX.2 of PTI No. 83-19. 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. AQD will issue a VN letter for violating the SC IX.2 of PTI No. 83-19.

NAME DATE 09/22/2021SUPERVISOR 