

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

N775873378

<b>FACILITY:</b> NORTHSTAR CRUSHING AND SCREENING INC		<b>SRN / ID:</b> N7758
<b>LOCATION:</b> 8541 N Point 3 Lane, GLADSTONE		<b>DISTRICT:</b> Marquette
<b>CITY:</b> GLADSTONE		<b>COUNTY:</b> DELTA
<b>CONTACT:</b> Josh Nyquist , Operator		<b>ACTIVITY DATE:</b> 08/20/2024
<b>STAFF:</b> Drew Yesmunt	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> MINOR
<b>SUBJECT:</b> Targeted Inspections FY24		
<b>RESOLVED COMPLAINTS:</b>		

**Facility:** Northstar Crushing and Screening, Inc (SRN: N7758)

**Location:** 8541 N Point 3 Ln, Gladstone, Delta County, MI

**Contact(s):** Josh Nyquist, Operator; Bonnie Nyquist, President

### Regulatory Authority

*Under the Authority of Section 5526 of Part 55 of NREPA, the Department of Environment, Great Lakes, and Energy may upon the presentation of their card, and stating the authority and purpose of the investigation, enter and inspect any property at reasonable times for the purpose of investigating either an actual or suspected source of air pollution or ascertaining compliance or noncompliance with NREPA, Rules promulgated thereunder, and the federal Clean Air Act.*

### Facility Description

Northstar Crushing and Screening, Inc is a non-metallic mineral crushing facility based in Gladstone, MI. The company operates a portable crusher plant throughout the Upper Peninsula of Michigan. The facility conducts its crushing operation under PTI No. 32-07.

### Process Description

A crushing plant produces smaller size aggregate from larger size rock. A crushing plant may consist of loaders, haul trucks, generators, crushers, screens, conveyors, and stockpiles. The plant is normally located within a quarry and crushes stone generated from blasting. The final product may be used for a variety of applications, including infrastructure projects and landscaping.

The process begins with raw material being fed into a primary crusher via loader, producing an initial size product. From the primary crusher, the product is conveyed into a screen plant that separates the crushed aggregate into various sized products. Smaller material is filtered out and leaves on separate conveyors to stockpiles, while larger material is transported to a secondary crusher. The secondary crusher will break the aggregate down to a smaller size aggregate before it enters the screen plant again or continues to a tertiary screen and crusher. A crushing plant

may have several crushers, screens, and conveyors depending on how many sizes of aggregate are to be produced.

### **Emissions**

Non-metallic mineral crushing can cause point and fugitive emissions of PM, PM10, and PM2.5. Emissions from process operations are considered fugitive unless the source of emissions is vented through an air pollution control device or contained and emitted through a force-air vent or stack. Fugitive sources of emissions are generated from machine movement and wind erosion. Emission sources can include hauling, crushing, screening, and transferring of material. The primary factors affecting PM emissions are wind and the moisture content of the material. Moisture on the surface of the material can cause fine particles to adhere resulting in a dust suppression effect.

### **Emissions Reporting**

The facility is subject to the federal New Source Performance Standards (NSPS) Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. Thus, this facility is required to submit annual emissions through MiEnviro each year. For 2023, the facility reported a total material throughput of 225,719 tons and a total emission value of 1.13 tons of PM10.

### **Compliance History**

The facility has not received any violation notices in the past five years. The facility was last inspected in June 2015 and was found to be in compliance with PTI No. 32-07 and all other applicable air pollution control rules and federal regulations.

### **Inspection**

On August 20, 2024, AQD staff (Drew Yesmunt) conducted a targeted inspection of Northstar Crushing and Screening, Inc. The facility's crusher plant was operating in the Skellenger Pit located on County Hwy H-26, Rock, MI. AQD staff arrived at the facility and met with Josh Nyquist, the facility's operator. It was explained that the purpose of the inspection was to ensure compliance with PTI No. 32-07 and all other applicable air pollution control rules and federal regulations. A tour of the facility was then provided.

AQD staff observed that all equipment onsite was covered by PTI No. 32-07, and no equipment was operating during the time of inspection. It was explained to AQD staff that the crusher plant had just been transported to the new pit and was still being set up for operation.

During the inspection, AQD requested information of what equipment was still owned and operated by the facility. The facility showed documentation of all permitted equipment under ownership of Northstar Crushing and Screening, Inc. Documentation demonstrating that visible emissions testing had been completed for all equipment was also provided.

The updated table below shows all equipment permitted under PTI No. 32-07 that is still operated by the facility, as well as when visible emissions testing was completed.

<b>Equipment ID</b>	<b>Equipment Description</b>	<b>Visible Emissions Test Date</b>
<b>C*</b>	<b>Cone Crusher</b>	<b>10/30/2008</b>
<b>D</b>	<b>Screen Plant</b>	<b>09/20/2007</b>
<b>E</b>	<b>Screen Plant</b>	<b>03/16/2012</b>
<b>F</b>	<b>Primary Crusher</b>	<b>03/12/2014</b>
<b>G*</b>	<b>Rollercone Crusher</b>	<b>03/12/2014</b>
<b>H*</b>	<b>Primary Crusher</b>	<b>03/2018</b>
<b>I</b>	<b>Impact Crusher</b>	<b>Has not operated yet</b>
<b>2*</b>	<b>Stacker Conveyor</b>	<b>07/24/2007</b>
<b>3</b>	<b>Conveyor</b>	<b>09/20/2007</b>
<b>4*</b>	<b>Conveyor</b>	<b>07/24/2007</b>
<b>7*</b>	<b>Conveyor</b>	<b>05/2011</b>
<b>8</b>	<b>Feeder</b>	<b>03/16/2012</b>
<b>9</b>	<b>Conveyor</b>	<b>03/2013</b>

10*	Conveyor	08/2015
11	Conveyor	03/2013
12*	Conveyor	03/2013
13	Conveyor	03/2013
14*	Radial Stacker Conveyor	03/2013
15	Hopper/Conveyor	03/12/2014
16*	Conveyor	08/2015
95	Radial Stacker Conveyor	05/05/2010

**\*Denotes equipment present onsite during the time of inspection.**

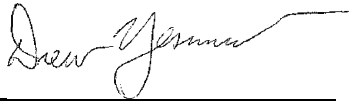
During the inspection, the facility appeared to be following all operational requirements of its fugitive dust plan. No visible emissions were observed while on-site, and water sprays were observed on all necessary equipment. The facility explained that water is also applied as needed to the plant yard, although dust suppressant application records were not maintained as required by the facility's fugitive dust plan. AQD staff explained this was an area of non-compliance and could lead to a violation notice if the record is not maintained. The facility responded, providing verbal commitment to maintain the record going forward.

Following the inspection, AQD staff sent a records request to Bonnie Nyquist, President of Northstar Crushing and Screening, Inc. The records requested included material processing records for all sites for 2023 and 2024. Material processing records were provided and showed the facility produced 225,719 tons of material in 2023 and 146,887 tons in 2024, under the facility's 12-month rolling limit of 2,000,000 tons.

It was also noted by AQD staff that the facility has been consistent in submitting relocation notices to AQD as the plant moves throughout the Upper Peninsula of Michigan. At the time of inspection, the plant had relocated four times in 2024.

## **Compliance**

Based on this inspection and the records reviewed, Northstar Crushing and Screening, Inc. appears to be in compliance with PTI No. 32-07 and all other applicable air pollution control rules and federal regulations. It was conveyed to the facility that no violations were observed during the onsite inspection, but going forward, record of dust suppression activities must be maintained to remain in compliance.

NAME 

DATE 10/1/2024

SUPERVISOR 