

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

N791467391

FACILITY: Gold Bond Building Products TAWAS QUARRY		SRN / ID: N7914
LOCATION: 9675 SOUTH SAND LAKE RD, NATIONAL CITY		DISTRICT: Bay City
CITY: NATIONAL CITY		COUNTY: IOSCO
CONTACT: Dennis Revord , Environmental Health and Safety Manager		ACTIVITY DATE: 05/10/2023
STAFF: Nathanael Gentle	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled Onsite Inspection		
RESOLVED COMPLAINTS:		

On May 10, 2023, AQD staff conducted a scheduled onsite inspection at Gold Bond Building Products Tawas Quarry, SRN N7914. The purpose of the inspection was to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; Michigan Department of Environment Great Lakes and Energy, Air Quality Division (AQD) and to determine compliance with the facility's Permit to Install (PTI), PTI No 371-06. AQD staff were assisted onsite by Mr. Dennis Revord. At the time of inspection, the facility was found to be in compliance.

Facility Description and History

Gold Bond Building Products-Tawas Quarry is located at 9675 South Sand Lake Rd, National City, MI. The facility is largely surrounded by forested land with the closest nearby residences located north and south of the facility.

Gold Bond Building Products-Tawas Quarry is an affiliate of National Gypsum Company. The facility mines and crushes naturally occurring gypsum. Gypsum is crushed onsite in a portable crusher. The crushed gypsum is trucked offsite to be sold, or for use at the nearby Gold Bond Building Products wallboard manufacturing facility.

Gold Bond Building Products- Tawas Quarry is a minor source of all regulated air pollutants. One PTI is associated with the facility, PTI No. 371-06. Issued on 12/21/2006, PTI No. 371-06 is a General PTI for Non-Metallic Mineral Crushers. The originally permitted crusher was an Impact Roll Crusher (Model DBT SB1315) with a rated capacity of 700 tons/hr. The Impact Roll Crusher was replaced with a MOBICAT MC 120i PRO model with a feed capacity of 717 tons/hr. A modification application to replace the originally permitted crusher was submitted to the AQD on June 17, 2022. Letter of approval for the modification was sent to the facility on June 28, 2022.

No recent complaints are on file for the facility. The facility was last inspected in September 2013. At the time of the 2013 inspection, the facility was found to be in compliance. The crusher is subject to the federal NSPS Subpart OOO- Standards of Performance for Nonmetallic Mineral Processing Plants. Annual emissions from the facility are reported to the Michigan Air Emissions Reporting System (MAERS). Emission reports for the facility have historically been submitted on time and complete.

Compliance Evaluation

The facility operates a MOBICAT MC 120i PRO model crusher. The crusher replaced the previously permitted crusher, an Impact Roll Crusher (Model DBT SB1315). The Impact Roll Crusher was observed to still be onsite, but not operating. The facility provided proper notification of the change including an EQP5756 Process Information Form as part of a PTI modification application, Special Condition (S.C.) 1.12. Startup of the new crusher occurred on November 22, 2022. Notice of startup is to be provided within 15 days after initial startup, S.C. 1.10. Notification of the startup date was provided to the AQD on November 23, 2023.

In compliance with NSPS Subpart OOO, Method 9 visible emission monitoring was completed on November 23, 2023, S.C. 1.8. Visible emission monitoring procedures shall be approved by the district supervisor no less than 14 days prior to the anticipated test date, S.C. 1.8. Facility staff contacted the AQD on 11/23/2023 requesting permission to complete Method 9 readings that same day explaining that because the crusher was received late in the season, the time of year, weather condition changes and upcoming holidays were potential challenges. District staff granted the facility permission to complete the Method 9 testing on 11/23/2023. Due to the short notice, AQD staff were unable to observe the testing. Method 9 readings were taken from both the hopper opening and the discharge belt. Copies of the completed visible emission forms were provided. Opacity observations for both the feed hopper and the discharge belt ranged from 0 to 10% opacity. Method 9 analysis was completed by Mr. Dennis Revord. Documentation of Mr. Revord's Method 9 certification was provided with the test results.

Gypsum is the only material processed in the crusher. The crusher is operated in the quarry pit. No material containing asbestos is crushed, Special Condition 1.5. While the crusher is a portable unit, the crusher remains onsite at the quarry and is not relocated to any new geographical sites, S.C.1.13.

The crusher is equipped with water spray for control of particulate matter (PM) emissions, S.C. 1.7. The facility does not use any baghouse dust collectors in lieu of water spray. Facility staff report the water spray controls are operated as needed to suppress dust emissions. Staff visibly monitor dust emissions to determine when water spray controls need to be operated. Water for the water spray system is obtained using either a portable water tank, or from a nearby pond onsite. During the onsite inspection, the crusher was operating. Water spray controls were not being operated. AQD staff observed the crusher operation; visible emissions for all pieces of equipment were observed to be in compliance with the opacity limits of S.C. 1.2.

Special Condition 1.3 limits the amount of any non-metallic minerals processed through FGCRUSHING to no more than 2,000,000 tons per year per site. The permittee shall keep daily and annual records of the amount of material processed, S.C. 1.9. AQD staff reviewed the facility's records during the onsite inspection. Amount of material processed is tracked based on the outgoing tonnage each day. The facility is equipped with a truck scale to weigh the amount of material per load. Material totals are tracked in a spreadsheet. During the month of April 2023, a total of 42,886 tons of material was processed. During calendar year 2022, a total of 401,067 tons of material was processed, well below the 2,000,000 tons per year per site limit.

The facility implements a fugitive dust plan to control fugitive dust emissions from onsite activities, S.C.1.6 and Appendix A. The discharge belt of the crusher is fixed, limiting the facilities ability to control the drop distance. Excess fugitive emissions were not observed from the

discharge point. Material stockpiles are monitored and managed for fugitive dust on an as needed basis.

Crushed material is loaded into trucks in the quarry pit. Trucks then drive the material up a dirt road onsite to the entrance/exit of the facility. Staff report all trucks are inspected at the scale prior to leaving the facility to prevent truck contents from dropping, leaking, blowing, or otherwise escaping.

Dust from site roadways is controlled using a water truck. Water is applied to roadways as needed. Staff report the facility will continuously run the water truck up and down the onsite road if needed during exceptionally dry periods. During the onsite inspection some fugitive dust was observed from site roadways. Staff operating the water truck were just arriving back from lunch and were filling the water truck to begin water application. The facility is equipped with a truck wash station and a street sweeper to minimize track out onto public roadways.

Summary

On May 10, 2023, AQD staff conducted a scheduled onsite inspection at Gold Bond Building Products Tawas Quarry, SRN N7914. Gold Bond Building Products-Tawas Quarry is located at 9675 South Sand Lake Rd, National City, MI. The facility mines and crushes naturally occurring gypsum. Gypsum is crushed onsite in a portable crusher. The crushed gypsum is trucked offsite to be sold, or for use at the nearby Gold Bond Building Products wallboard manufacturing facility. Gold Bond Building Products- Tawas Quarry is a minor source of all regulated air pollutants. One PTI is associated with the facility, PTI No. 371-06 a General PTI for Non-Metallic Mineral Crushers. At the time of inspection, the facility was found to be in compliance.


NAME _____

DATE 6/5/2023

SUPERVISOR 
