

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

B492271841

FACILITY: STONECO INC, Ottawa Lake		SRN / ID: B4922
LOCATION: 7555 Whiteford Rd, OTTAWA LAKE		DISTRICT: Jackson
CITY: OTTAWA LAKE		COUNTY: MONROE
CONTACT: Susanne Hanf, P.E. , Environmental Engineer		ACTIVITY DATE: 06/06/2024
STAFF: Diane Kavanaugh Vetort	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Conducted complete scheduled inspection FCE SM Opt Out facility. NSPS Subpart OOO facility.		
RESOLVED COMPLAINTS:		

Full Compliance Evaluation (FCE) B4922 Stoneco, Ottawa Lake, 7555 Whiteford Road, Ottawa Lake, Monroe County.

Contacts:

Hunter Schafer, Plant Superintendent

Sue Hanf, Environmental Engineer, 734-854-2265, shanf@mipmc.com**Purpose**

On June 6, 2024, I conducted a complete scheduled inspection, announced a short time prior, of the Stoneco, Ottawa Lake (Ottawa) facility at the above location. The purpose of the inspection is to determine the facility's compliance with the Federal Clean Air Act; Article II, Part 55, the Michigan Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451 and the administrative rules; the Federal New Source Performance Standard (NSPS) for Nonmetallic mineral processing facilities, 40 CFR Part 60, Subpart OOO (Subpart OOO) and the conditions of their Permit to Install (PTI) No. 122-05G for a stationary limestone crusher plant and the associated mining, storage, and processing of materials. This is a full compliance evaluation (FCE) of this synthetic minor/Opt Out facility. The last inspection was August 2020.

Background

Stoneco owns and operates many quarries around the State of Michigan. This quarry is used to mine limestone, much of which is used by their clients in the production of concrete pavement. Operations include process equipment for crushing stone to smaller aggregate (i.e. crushers, screens, conveyors, stackers, etc.). It also includes construction type equipment and heavy vehicle traffic, numerous storage piles, and drilling and blasting to mine materials. The site includes three crushing plants; primary and (2) secondary, and a wash plant. During the inspection, all the equipment associated with the primary and secondary crushers, and the wash plant were operating.

This facility is a Synthetic Minor source of Particulate Matter (PM) which is why their PTI identifies opacity limits, design requirements, and operational restrictions in order to stay below thresholds of a major source. In order to demonstrate compliance, this facility is required to submit usage and emission records annually and maintain air pollution control (mainly water spray nozzles and fugitive dust controls).

Additionally, this facility is subject to the NSPS Subpart OOO which restricts particulate emissions. Appropriate NSPS required visible emissions testing is conducted as applicable for equipment and the PTI is updated as needed.

Compliance Evaluation

Upon my arrival I did not observe any significant track out of fugitive dust at the facility entrance. The entrance is paved. I observed several limestone haul trucks enter and exit the driveway. The office is located next door with a separate parking lot. Weather today was clear, mostly sunny and @ 70-75 degrees with fairly strong winds out of the west. Significant rain was received through the area early last night.

Stoneco employs appropriate safety measures and I reviewed their materials in the office upon my arrival. I met with Sue Hanf at the Stoneco office and also the new plant manager, Hunter Schafer, he started early this calendar year. We conducted a pre-inspection meeting. Sue and I discussed their permit required recordkeeping. I

requested all required recordkeeping be submitted electronically by Friday, June 14. Hunter said they have @28 employees and operate shifts 6 AM to 6 PM, Monday through Friday, with every other Saturday. The plant started up this year in March. Sue showed me a current wall map of the entire site. There are two active mining areas to the north. I learned Ottawa's property boundary includes most of the houses around them in a large "block" on four sides.

Regarding Ottawa's Fugitive Dust Plan, Hunter said they have one Water Truck, I observed this on-site during the inspection and also their identified fill station at a groundwater trench/pond in the quarry near the entrance. He said they applied Chloride to the site last week, and usually this is done about once/month.

During the inspection the three of us rode in Hunter's company truck. We drove the general perimeter of the site and around specific plant equipment, the storage areas, and the current mining areas. The PTI 122-05G contains the following Emission Units (EU) and Flexible Group (FG):

EUTRUCKTRAFFIC

This is the emission unit (EU) for haul truck traffic and loader vehicles associated with processing equipment, material handling, and loading/unloading activities. Visible emissions (VE) are limited to 5% opacity from these types of vehicles. In order to meet this condition unpaved roadways are treated with a chloride solution and watered as needed. VEs exceeding 5% were not observed during the inspection.

The facility is limited to the equivalent of 80,000 – 50 ton transport trucks over a 12-month rolling time period. Stoneco's record reports 68,103 ton equivalent <80,000 limit. All records are attached to the report to file. I observed the site was fairly busy with consistent traffic. I also observed the wheel wash system was in place and operating; this is required under this section of the permit. Hunter also said that they contract services through a sweeper company to have the paved areas swept 3-4 times per week.

EUPROCESS

This is the EU that covers process equipment including crushing, screening, and conveyors, which are used to reduce materials to smaller sizes. This includes the three crushing plants, primary and (2) secondary, and a wash plant. VEs are controlled by water sprays attached to the equipment. I observed water sprays were operational on the crushers and other equipment. However, some more excessive VE's (greater than 5%) were observed blowing from the Cone Crusher and Stacker. While we were there Hunter contacted an operator to increase the valve opening to the Stacker. He said after shifts today they will inspect the top of the Cone Crusher & a conveyor that does not currently have water spray. He said he would notify Sue and I asked that she follow up with me. I advised Stoneco to add water here as it appears to be needed. I received photo documentation of spray nozzle installation at the conveyor /top of Cone Crusher and inspection checklist record on 6/13 and 6/18. Photos are attached to this report to file.

Overall, the standards set forth in NSPS OOO appear to be met as they apply to this facility; in particular the water controls are eliminating VEs from the process, or the material has sufficient moisture. Stoneco was advised that all nozzles and water connections need to be maintained and monitored during operations.

Stoneco is limited to 21,600 tons per day, and 4,000,000 tons of material on a 12-month rolling time period at this site. compliance with this limit. All records are attached to the reports to file. The facility does not process any materials containing asbestos.

EUSTORAGE

This is the EU for storage piles on site, which include the various sized aggregate piles. The initial product is dampened from spray bars as it goes through processing, but is maintained with a water spray as needed before loaded out. The limit of 5% opacity as written in this condition was being met during the inspection. The facility appears to be following the fugitive dust plan in Appendix B of the permit as it pertains to storage piles.

EUBLASTING

This is the EU for the use of explosives to loosen limestone for excavation and processing. XXX compliance with this limit. All records are attached to the reports to file. Stoneco does not perform more than 1 blast per day nor over 40,000 square feet at a time. They are also limited to be at least 100 feet distance of the property line. During the inspection I

observed one drilling unit was on the top ledge of the current blast area to the N, NW of the property. No blasting was occurring during the inspection.

FGFACILITY

This is the flexible group (FG) for all process equipment source-wide. The only special conditions of this section are that the entire working part of the quarry is surrounded by either fence or berm **and that process equipment not be operated within 300 feet of the property line.** I asked about this condition during the prior inspection (2020) and was informed the site is not fenced, but does have berms. All the process equipment is within the quarry walls. These conditions appear to be being met.

APPENDICES A AND B

The PTI contains Appendix A, a list of equipment description with ID Numbers, the Facility EQ Number and the Opacity Limit (5% for all equipment), and the Control Device. The equipment I observed had visible ID Numbers. My understanding is Stoneco audits these at least annually and submits changes as a PTI revision. Other than the Secondary Crusher and Stacker VE issue discussed above, there were no other VEs observed.

The PTI contains Appendix B, the Nuisance Minimization Plan for Fugitive Dust. This identifies dust control and minimization of all the areas discussed above. Stoneco appears to be in Compliance with this plan.

Summary

The first location we drove to the area around the main plant. This is where VEs were observed and discussed. We then drove to the primary crusher load area which is higher on a hill. There were no issues or emissions in this area. We drove to the site of the Cardinal Aggregate portable plant on-site to process a specific amount of material. We drove near the current mining location and I had a good view of the blasting area. The drill rig was seen on top of the ridge but no activity was observed. No blasting was occurring to day.

We then drove around the storage piles, wash plant and the Wheel wash area before returning to the office. No other excess particulate emissions were observed. The site was very busy with numerous trucks observed entering and leaving the facility. I observed they appeared to be following speed limit signs and using the wheel wash before exiting the facility yard. I did not observe significant fugitive emissions from the yard, paved areas or track out onto the main road. Again I observed at least one Water Truck on-site operating.

Records Received and Review

On 6/13 and 6/18, AQD received the requested electronic records from Sue Hanf. The time period of the required records is 2023 season through the most recent complete month, May 2024. Records can be summarized by month and/or in spreadsheet format with relevant assumptions, support documentation, formulas, emission factors clearly identified. The Permit contains the following Conditions with record keeping requirements.

EUPROCESS

Condition VI.1. Calculation records monthly. 2. Daily and monthly records of material processed for the 12 month rolling time period.

Condition IV.1. Demonstration that all control devices are installed, maintained and operated in a satisfactory manner as listed in Appendix A.

EUTRUCKTRAFFIC

Condition III.2. Fugitive Dust Plan Appendix B.

Condition VI.2. a) through c) Records of material shipped off-site, and monthly calculations to determine the equivalent number of 50-ton transport trucks enter/leave monthly & for the requested 12 month rolling time period.

EUSTORAGE

(See above Fugitive Dust Plan)

EUBLASTING

Condition III.1. and 2. limits for single blast / day and maximum surface area of any single blast not to exceed 40,000 sq.ft. Also, not to blast or perform excavation (excluding earthen berms) within 100 feet of any property line.

Condition VI.1. Monthly records for the current operating season of number of blasts and details.

FUGITIVE DUST PLAN

Appendix B. I. A. Record of all watering/dust suppressant applications for the current operating season.

STONECO RECORDS -MONTHLY & DAILY PRODUCTION

AQD received records for the current season and the prior 12 month period ending May 2024. Sue submitted Ottawa Lake's 2023 and 2024 OLQ Road Record Keeping Logs, and a spreadsheet containing the Production records, Truck traffic, and Blasting data.

Monthly Production: 12 month rolling as of month ending May = 3,066,328 tons

LIMIT: 4,000,000 tons of material per 12 month rolling time period. COMPLIANT

All reported Tons per day are below the daily limit. Highest daily total was 11,226 tons in May 2024, and was 13,124 tons in August 2023. **LIMIT:** 21,600 tons of material per day. COMPLIANT.

TRUCK TRAFFIC

Truck Axle 12 month rolling Sales: Spreadsheet shows the Month, Tons shipped, 50 ton equivalent, Rolling 12 month period (<80,000 limit), and the YTD Actual tons /last day of the month. Entries for May 2024 = 376,753 tons shipped, 7,535 (50 ton equiv), 68,103 12 month rolling, and 1,030,742 YTD actual tons. **LIMIT:** Maximum equivalent of 80,000 - 50 ton transport trucks on a 12 month rolling time period. COMPLIANT

BLASTING

Record shows date/time, cubic yards blasted, depth hole, square feet, # blasts, and # holes. Totaled cubic yards blasted and tons per Blast. This season blasting has occurred in January (2 days), March (7 days), April (7 days), May (7 days), June (1 day as of this report), indicates one blast per day. Largest blast was on 5/16/24 with 107 holes, 20,865 square feet, and 44,048 cubic yards.

LIMITS: Maximum of 1 blast per calendar day; maximum surface area of any single blast shall not exceed 40,000 FT². COMPLIANT

2023 AND 2024 OLQ ROAD RECORDKEEPING LOG

FUGITIVE DUST PLAN: Daily dust suppression log shows production started this season on March 4, and the 2023 season started in April. Log lists Roadways water/control, Storage Piles water/control, Plant: Water Spray operating yes or no, and if not operating the reason why, raining, etc...

Log appears complete and acceptable and Ottawa is using a combination of dust suppression options. 1) hired sweeper truck to address paved portions at entrance and road track out onto Whiteford Road. 2) Water Truck. 3) Rain/snow. While not specifically listed, Chloride is also used. On May 28, 2024 there is an entry for Chloride in the log at this time. Ottawa is advised to continue to clearly log Chloride applications (review of all past logs received did not find any Chloride applications logged)

Compliance Determination

AQD has determined the Stoneco, Ottawa Lake facility is in substantial compliance with their PTI No. 122-05G and the applicable state and federal regulations. Visible Emissions were observed at two locations, secondary Cone Crusher and Stacker. These were addressed timely with photo documentation sent 6/13 and 6/18. Water spray was added to the top of the Cone Crusher.



Image 1(Cone Crusher 1) : B4922 spray nozzle added top of cone crusher 061324



Image 2(Cone Crusher 2) : B4922 cone crusher spray nozzle 061324



Image 3(Cone Crusher 3) : B4922 spray nozzle photo conveyor 061324



Image 4(Cone Crusher 4) : B4922 view top of conveyor drop to crusher 061324

OTTAWA LAKE STONECO WORK PLACE EXAMINATION RECORD

WEEK ENDING DATE: **6/15/24**

Area	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
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2nd Shift							
Front							
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Manager/General Director							
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