



NON-METALLIC MINERAL PROCESSING PLANTS



COMPLIANCE INSPECTION CHECKLIST

INSPECTION TYPE: ANNUAL (INS1, INS2) COMPLAINT/DISCOVERY (CI)
 RE-INSPECTION (FUI) ARMS COMPLAINT NO:

AIRS ID#: 7774817 **DATE:** 04/15/09 **ARRIVE:** 12:38 pm **DEPART:** 2:12pm

FACILITY NAME: ST. CATHERINE MINE

FACILITY LOCATION: HWY 673
ST. CATHERINE 33513

OWNER/AUTHORIZED REPRESENTATIVE: JON KOEPKE **PHONE:** (352)799-3522

CONTACT NAME: Brandell Campbell **PHONE:** (352)427-6664

ENTITLEMENT PERIOD: 5/17/2007 / 5/17/2012
(effective date) (end date)

PART I: INSPECTION COMPLIANCE STATUS (check only one box)

IN COMPLIANCE MINOR Non-COMPLIANCE SIGNIFICANT Non-COMPLIANCE

PART II: DETERMINATION OF FACILITY TYPE/APPLICABILITY
(check only one box)

FOR FACILITIES SUBJECT TO: (40 CFR Part 60, Subpart OOO, §60.670(a)(1))
(If you have checked this category, answer all questions **INCLUDING** those with **.)

Subject Facilities: (applicable fixed or portable facilities include each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station, crushers & grinding mills at hot mix asphalt facilities that reduce the size of non-mettalic minerals embedded in recycled asphalt pavement & subsequent affected facilities up to, but not including the first storage silo or bin.)

FOR FACILITIES NOT SUBJECT TO: (40 CFR Part 60, Subpart OOO, §60.670(a)(2), (b), (c), and (d))
(If you have checked this category, answer all questions **EXCEPT** those with **.)

Non-Subject Facilities: (includes all facilities in underground mines; stand-alone screening operations at plants w/o crushers or grinding mills; facilities not subject to subparts F (Portland Cement Plants) or I (Hot Mix Asphalt Facilities) of this part; fixed sand & gravel plants, & crushed stone plants w/capacities of 23 megagrams/hr (25 tons/hr) or less; portable sand & gravel plants, & crushed stone plants w/capacities of 136 megagrams/hr (150 tons/hr) or less; common clay plants, and pumice plants w/capacities of 9 megagrams/hr (10 tons/hr) or less.)

PART III: EMISSION STANDARDS – Chapter 62-210.300(4)(c)5., F.A.C.

(check appropriate box(es))

Stack Emissions - 40 CFR Part 60, Subpart OOO adopted by reference Chapter 62-204.800, F.A.C.

- **1. Were visible stack emissions tests conducted during this site visit according to EPA Method 9 (40 CFR 60, Appendix A)?----- Yes No
- **2. Do stack emissions from any crusher, grinding mill, screening operation, bucket elevator, transfer point on belt conveyors, bagging operation, storage bin, enclosed truck or railcar loading station or any other affected emission point:
- **a) exceed **7%** percent opacity?----- Yes No
- **b) exceed the particulate matter standard of **0.05 grams** per dry standard cubic meter (g/dscm)?----- Yes No
- **3. Do stack emissions from any baghouse that controls emissions from only an individual, enclosed storage bin exceed **7%** percent opacity?----- Yes No

Visible Emissions - 40 CFR Part 60, Subpart OOO adopted by reference Chapter 62-204.800, F.A.C.

- **1. Were visible emissions tests conducted during this site visit according to EPA Method 9 (40 CFR 60, Appendix A)?----- Yes No
- **2. Do visible emissions from any:
- **a) grinding mill, screening operation, bucket elevator, transfer point on belt conveyors, bagging operation, storage bin, enclosed truck or railcar loading station or any other affected emission point exceed **10%** percent opacity?----- Yes No
- **b) crusher without a capture system, exceed **15 %** opacity?----- Yes No
3. Pursuant to subparagraph 62-296.320(4)(b)1., F.A.C., are visible emissions from any crusher, grinding, screening operation, bucket elevator, transfer points on belt conveyors, bagging operation, storage bin, enclosed truck or railcar loading station, or any other emission point **NOT** subject to 40 CFR Part 60, Subpart OOO, equal to or greater than **20%** percent opacity?----- Yes No

Emission Points Enclosed in Buildings - 40 CFR Part 60, Subpart OOO adopted by reference Chapter 62-204.800, F.A.C.

- **4. Is any crusher, grinding mill, screening operation, bucket elevator, transfer point on belt conveyors, bagging operation, storage bin, enclosed truck or railcar loading station, or any other affected emission point enclosed in a building? (*If answer to question #4 is YES, then proceed to #4.a*).----- Yes No
- **a) If enclosed in a building are the stack emissions discharged from a wet scrubbing control device? (*If answer to this question is NO, then proceed to the next question #4.b)1) & 2). If YES skip to #4.c*).-- Yes No
- **b) If the stack emissions from enclosed emission points are not discharged from a wet scrubbing control device is:
- 1) the particulate matter in excess of **0.05 grams** per dry standard cubic meter (g/dscm)?----- Yes No
- 2) the opacity greater than **7%** percent?----- Yes No
- **c) Do the stack emissions from the baghouse(s) inside of the building(s) exceed **7%** percent opacity?--- Yes No
- **5. Do visible emissions from any:
- **a) grinding mill, screening operation, bucket elevator, transfer point on belt conveyors, bagging operation, storage bin, enclosed truck or railcar loading station or any other affected emission point exceed **10%** percent opacity?----- Yes No
- **b) crusher without a capture system, exceed **15 %** opacity?----- Yes No

Wet Screening/Wet Mining Operations:

- **6. Are there any visible emissions discharges at the wet screening operations and subsequent screening operations, bucket elevators and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill, or storage bin?----- Yes No
- **7. Are there any visible emissions discharges at the screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, where such screening operations, bucket elevators, and belt conveyors process saturated materials up to the first crusher, grinding mill, or storage bin in the production line?----- Yes No

PART IV: TESTING/RECORDKEEPING REQUIREMENTS – Rule 62-210.300, F.A.C.

(check appropriate box(es))

Compliance Demonstration – (Rule 62-210.300(4)(c)5.h., F.A.C.)

1. Is each affected emission point tested according to the visible emissions and stack emissions standards as part of the annual compliance demonstration? (Rule 62-210.300(4)(c)5.e., F.A.C.)----- Yes No

Compliance New Facilities – (Rule 62-210.300(4)(c)5.h., F.A.C.)

2. Did this facility demonstrate, according to the visible emissions and stack emissions standards of Rule 62-210.300(4)(c)5.e., F.A.C.,:
- a) initial compliance prior to beginning commercial operation? ----- Yes No
- b) renewal compliance within 60 days prior to the anniversary of the initial air general permit notification form submittal date?----- Yes No

Compliance Existing Facilities – (Rule 62-210.300(4)(c)5.h., F.A.C.)

3. Did this facility demonstrate, according to the visible emissions and stack emissions standards of Rule 62-210.300(4)(c)5.e., F.A.C.,:
- a) compliance within 60 days prior to submitting an air general permit notification form?----- Yes No
- b) renewal compliance within 60 days prior to the anniversary of the initial air general permit notification form submittal date? ----- Yes No

Test Methods and Procedures – Chapter 62-297, F.A.C., 40 CFR 60.675, and 40 CFR Part 60, Appendix A adopted and incorporated by reference at Rule 62-204.800, F.A.C.

4. Were all referenced visible emissions tests conducted using EPA Method 9?----- Yes No
5. Were all referenced unconfined or fugitive emissions tests conducted using EPA Method 22?----- Yes No
6. Were all referenced stack emissions or particulate matter tests conducted using EPA Methods 5 or 17? Yes No

Reporting and Recordkeeping – (Rule 62-210.300(4)(c)5.e., F.A.C.) [Chapter 62-297, F.A.C. and 40 CFR Part 60.670 – 60.676, Subpart OOO, adopted and incorporated by reference at Rule 62-204.800, F.A.C.]

Facility and/or Equipment Replacement

- **7. Did the owner or operator submit to the Administrator, the following information about the replacement of existing facility and/or equipment:
- **a) for a Crusher, Grinding Mill, Bucket Elevator, Bagging Operation, or enclosed truck, or Railcar Loading Station,
- **1) the rated capacity in megagrams or tons per hour of the existing facility being replaced and the rated capacity in tons per hour of the replacement equipment?----- Yes No
- **b) for a Screening Operation,
- **1) the total surface area of the top screen of the existing screening operation being replaced and the total surface area of the top screen of the replacement screening operation?----- Yes No
- **c) for a Conveyor Belt,
- **1) the width of the existing belt being replaced and the width of the replacement conveyor belt?----- Yes No
- **d) for a Storage Bin,
- **1) the rated capacity in megagrams or tons of the existing storage bin being replaced and the rated capacity in megagrams or tons of replacement storage bins?----- Yes No

Performance/Compliance Testing

- **8. During the initial performance test, did the owner or operator record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate?----- Yes No
- **9. After the initial performance test of a wet scrubber, did the owner or operator submit semiannual reports to the Administrator of occurrences when the measurements of the scrubber pressure loss (or gain) and liquid flow rate differ by more than ±30 percent from the averaged determined during the most recent performance test?----- Yes No
- **a) Were the reports postmarked within 30 days following the end of the second and fourth calendar quarters?----- Yes No

PART IV: TESTING/RECORDKEEPING REQUIREMENTS – Rule 62-210.300, F.A.C. (Continued)

(check appropriate box(es))

- **10. Did the owner or operator of the facility submit written reports of the results of all performance tests conducted to demonstrate compliance with the particulate matter standards (40 CFR Part 60.672), opacity (using EPA Method 9 to demonstrate compliance with 40 CFR Part 60.672(b), (c), and (f)), and emission observations of transfer points enclosed in buildings (using EPA Method 22 to demonstrate compliance with 40 CFR Part 60.672(e))?----- Yes No

Process Changes

- **11. Does this facility have a screening operation, bucket elevator, and/or a belt conveyor system? (*If your answer to this question is YES, then answer either a)1) or a)2) below.*)----- Yes No
- **a) Did this screening operation, bucket elevator, and/or belt conveyor system:
- **1) originally process saturated material and switch to unsaturated material? (*Note: The unsaturated material handling processes would now be subject to the 10% opacity limit in 40 CFR 60.672(b) and the emission test requirements of 40 CFR 60.11 and Subpart OOO.*)----- Yes No
- **2) originally process unsaturated material and switch to saturated material? (*Note: The saturated material handling processes would now be subject to the no visible emission limit in 40 CFR 60.672(h.) (If answer to 1) or 2) above is YES then proceed to question b) below.*)----- Yes No
- **b) Did the owner or operator submit a report of the process change within thirty (30) days following the change?----- Yes No

Notification Requirements

- **12. Was notification of the actual date of startup for each affected or combination of affected facilities submitted to the Administrator and postmarked within 15 days after such date?----- Yes No
- **a) Did the notification include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available?----- Yes No
- **b) For portable aggregate processing plants, did the notification of actual date of initial start up also include both the home office and the current address or location of the portable plant?----- Yes No

PART V: OPERATING REQUIREMENTS/CONTROL TECHNOLOGY – Rule 62-210.300, F.A.C.

(check appropriate box(es))

1. Is this facility a: 1) relocatable; 2) stationary; or does it have: 3) both, stationary and relocatable concrete batching and/or nonmetallic mineral processing plants? (*Please check only one box above.*) (*NOTE: If you have checked the box for relocatable go to questions 1.a) & 1.b). If you have checked the box for stationary go to question 1.c). If you have checked box #3, both, stationary and relocatable then answer all relocatable and stationary questions 1.a), 1.b), & 1.c) below, respectively.*)
- a) If this is a **relocatable facility** was the Department notified by phone prior to this relocation, and was a Facility Relocation Notification form submitted within 1 business day following the relocation?----- Yes No
- b) If this is a **relocatable facility**, is it located at a mine and/or quarry, and processing only material from onsite deposits? (*If your answer to this question is NO, please proceed to question 1) below.*)----- Yes No
- 1) Does the owner or operator of this relocatable facility have a water suppression system with spray bars located at the feeder(s), the entrance, and the exit of the crusher(s), the classifier screens and the conveyor drop points?----- Yes No
- c) If this is a **stationary facility**, does the owner or operator of this stationary facility have a water suppression system with spray bars located at the feeder(s), the entrance, and the exit of the crusher(s), the classifier screens and the conveyor drop points?----- Yes No

PART V: OPERATING REQUIREMENTS/CONTROL TECHNOLOGY – Rule 62-210.300, F.A.C. (Continued)

(check appropriate box(es))

- **2. Does this facility incorporate the use of a wet scrubber to control emissions? (40 CFR Part 60, Subpart OOO adopted by reference Chapter 62-204.800, F.A.C.) *(If your answer to this question is YES, then proceed to questions 2.a) and 2.b), below.)*----- Yes No
- **a) Does the wet scrubber have continuous monitoring systems (CMS) for:
- **1) the measurement of the pressure loss of the gas stream through the scrubber?----- Yes No
- **2) the measurement of the scrubbing liquid flow rate to the wet scrubber?----- Yes No
- **b) Has each CMS been certified by the manufacturer and calibrated annually in accordance with the manufacturer's instructions and to the tolerances below?----- Yes No
- **1) ±250 pascals ±1 inch water guage pressure for measuring pressure losses of the gas stream?----- Yes No
- **2) ±5 percent of design scrubbing liquid flow rate?----- Yes No
3. Is this a stationary nonmetallic mineral processing plant, with a stationary concrete batching plant using an individual concrete batching plant air general permit at the same location? *(If your answer to this question is YES, then proceed to questions 3.a), thru 3.d), below. If NO, proceed to question #4.)*----- Yes No
- a) Is there more than one nonmetallic mineral processing plant in operation at this location?----- Yes No
- b) If there is more than one nonmetallic mineral processing plant at this location, do they all operate under a single nonmetallic mineral processing plant air general permit?----- Yes No
- c) Are there any additional nonexempt units located at this facility?----- Yes No
- d) Are there any Title V sources located at this facility?----- Yes No
4. Is this a stationary nonmetallic mineral processing plant, with one or more relocatable concrete batching plants using individual air general permits at the same location? *(If your answer to this question is YES, then proceed to questions 4.a), thru 4.b) below. If NO, then proceed to question 5.)* Yes No
- a) Are there any additional nonexempt units located at this facility?----- Yes No
- b) Are there any Title V sources located at this facility?----- Yes No
5. Does the owner or operator of this facility operate multiple relocatable nonmetallic mineral processing plants using individual nonmetallic mineral processing plant air general permits at this location?----- Yes No
- a) Are there any additional nonexempt units located at this facility?----- Yes No
- b) Is the total combined annual facility-wide fuel oil usage of all plants less than 240,000 gallons per calendar year?----- Yes No
- c) Is the quantity of material processed less than ten million tons per calendar year?----- Yes No
- d) Is the fuel oil sulfur content 0.5% by weight or less?----- Yes No
6. Does the owner/operator of the concrete batching plant maintain a log book or books to account for:
- a) fuel consumption on a monthly basis?----- Yes No
- b) material processed on a monthly basis?----- Yes No
- c) the sulfur content of the fuel being burned (Fuel supplier certifications)?----- Yes No
7. Is this relocatable nonmetallic mineral processing plant used to perform a routine function of a facility (*not a Title V source*) subject to regular air permitting, such as crushing recycled asphalt (rap) at an asphalt plant?----- Yes No
- a) If YES, does the regularly permitted facility air construction or air operation permit(s) provide for the operation of the nonmetallic mineral processing plant as an emission unit?----- Yes No
8. Is this relocatable nonmetallic mineral processing plant used to perform a non-routine activity, such as destruction of a building, at a regularly permitted facility (*not a Title V source*)?----- Yes No
- a) If YES, does it operate under the authority of its air general permit?----- Yes No

PART VI: REASONABLE PRECAUTIONS/EMISSION CONTROL MEASURES & TECHNOLOGY – Rule 62-210.300(4)(c)5.d.(i) and (ii), F.A.C.

(check appropriate box(es))

Unconfined Emissions – (Rule 62-296.320(4)(c), F.A.C.)

1. Does the owner /operator of the nonmetallic mineral processing plant take reasonable precautions to control unconfined emissions by:

- a) use of a water suppression system with spray bars located at the feeder(s), the entrance and exit of the crusher(s), the classifier screens, and the conveyor drop points?----- Yes No
- b) management of roads, parking areas, stock piles, and yards, which shall include one or more of the following:
 - 1) paving and maintenance of roads, parking areas, stock piles, and yards?----- Yes No
 - 2) application of water or environmentally safe dust-suppressant chemicals when necessary to control emissions?----- Yes No
 - 3) removal of particulate matter from roads and other paved areas under control of the owner/operator to re-entrainment, and from building or work areas to reduce airborne particulate matter?----- Yes No
 - 4) reduction of stock pile height, or installation of wind breaks to mitigate wind entrainment of particulate matter from stock piles?----- Yes No
 - 5) landscaping and/or the planting of vegetation?----- Yes No
 - 6) the use of hoods, fans, filters and similar equipment to contain, capture and/or vent particulate matter?----- Yes No
 - 7) the enclosure or covering of conveyor systems?----- Yes No

PART VII: SPECIAL CONDITIONS AND PROCEDURES – Rule 62-210.300(4)(d)4., F.A.C.

A. New or Modified Process Equipment

1. Since the last inspection has there been
- a) installation of any new process equipment?----- Yes No
 - b) alteration of existing process equipment without replacement?----- Yes No
 - c) replacement of existing equipment substantially different than that noted on the most recent notification form?----- Yes No
 - d) If you answered **YES** to any of the above, did the owner submit a new and complete notification form and appropriate fee (Rule 62-4.050, F.A.C.) to the appropriate DEP or local program office?----- Yes No

Wendy D. Simmons

04/15/2009

Inspector's Name (Please Print)

Date of Inspection

04/15/2012

Inspector's Signature

Approximate Date of Next Inspection

COMMENTS: Last inspection was conducted in January 2007. According to ARM's there are 8 emission points at this facility which require Visible Emissions Testing. In 2008 only 7 emission points were tested. I contacted Neil Lofgren of Koogler and Associates about the 2008 VE Testing, he stated that the outside scale hopper is no longer being used. Also, the facility's registration indicates that the roll crusher is NOT subject to Subpart OOO but it actually is because it is a relocatable unit capable of processing 500TPH and the facility's original combined construction/operating permit indicates the crushing unit was modified in 1994. This makes it subject to the NSPS requirements in Subpart "OOO". Inspection Findings: I spoke with Mr. Brandell Campbell of CEMEX. Mr. Campbell answered checklist questions and discussed emission points with me. I provided Mr. Campbell with a copy of the facility's current permit and the Subpart "OOO" requirements. I explained to Mr. Campbell that it appears the facility may need to submit a new Air General Permit Entitlement form which properly reflects the equipment's subjectivity to Subpart OOO. The facility does have a water truck that Mr. Campbell stated operates twice a day. There are no spray bars on the facility's crusher or conveying equipment. According to Mr. Campbell the product is mined below the water line and therefore, no spray bars are necessary. I witnessed Visible Emissions Testing on all 8 emission points, on this day and photos were taken of equipment and are attached.