



NON-METALLIC MINERAL PROCESSING PLANTS



COMPLIANCE INSPECTION CHECKLIST

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

AIRS ID#: 7775301 **DATE:** 11/26/2008 **ARRIVE:** 12:00 PM **DEPART:** 12:30 PM

FACILITY NAME: CRUSHCO / (DELRAY BEACH)

FACILITY LOCATION: 721 NW 1st Ave
MIAMI 33136-4102

OWNER/AUTHORIZED REPRESENTATIVE: IVY FRADIN **PHONE:** (561)715-0530

CONTACT NAME: **PHONE:**

ENTITLEMENT PERIOD: 10/10/2005 / 10/10/2010
(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-metallc 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

FRANK DELGADO

11/26/2008

Inspector's Name (Please Print)

Date of Inspection

11/2009

Inspector's Signature

Approximate Date of Next Inspection

COMMENTS: THE PORTABLE CRUSHER WAS OPERATIONAL AT THE TIME OF THE INSPECTION. I DID NOT OBSERVE ANY VISIBLE EMISSIONS WHILE I WAS ON SITE.
A VISIBLE EMISSIONS TEST WAS PERFORMED BY BROOKS AND ASSOCIATES ON MAY 27, 2008.