# CONCRETE BATCHING PLANT

## COMPLIANCE INSPECTION CHECKLIST

Environmental Compliance

**INSPECTION TYPE:** ANNUAL (INS1, INS2) ☒ COMPLAINT/DISCOVERY (CI) ☐

RE-INSPECTION (FUI) ☐ ARMS COMPLAINT NO:

**AIRS ID#:** 1050350 **DATE:** **01/24/2012** **ARRIVE:** **~13:30** **DEPART:** **~14:25**

**FACILITY NAME:** FOUR CORNERS READY MIX & BLOCK PLANT

**FACILITY LOCATION:** 4040 SAND MINE RD

DAVENPORT 33897

**OWNER/AUTHORIZED REPRESENTATIVE:** SIGURD BO **PHONE:** (407)841-8409
**Email:** Sigurdm.bo@cemex.com **Mobile:** (407)312-7119
**CONTACT NAME:** SIGURD BO **PHONE:** (407)841-8409
**Email:** Sigurdm.bo@cemex.com **Mobile:** (407)312-7119
**ENTITLEMENT PERIOD:** 10/12/2008 (effective date) / 10/12/2013 (end date)

## Facility Section

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

☒ IN COMPLIANCE ☐ MINOR Non-COMPLIANCE ☐ SIGNIFICANT Non-COMPLIANCE

**PART II: ONSITE INTRODUCTORY MEETING**

(check ☑ only one box for each question)

1. Name(s) of facility representative(s): Mike Johnson, Plant Manager

Brief Notes: This facility is the Cemex Four Corners (Davenport) Block Plant. Mike Johnson's contact information: Cell: (407) 973-6380; Office: (863) 547-0200. Mike Johson's new e-mail address is Howardm.johnson@cemex.com, and his old e-mail address (which may still be active) is hmjohnson@cemexusa.com.

2. Is the Authorized Representative still SIGURD BO? ---------- ☒ Yes ☐ No
   If no, who is?: N/A
   If different, did the facility provide an administrative update within 30 days? ---------- ☐ Yes ☐ No
3. Is the facility contact still SIGURD BO? ---------- ☒ Yes ☐ No
   If no, who is?: N/A
4. Will facility be conducting VE test(s) during today's inspection? ---------- ☒ Yes ☐ No
   If yes, was the compliance authority notified at least 15 days in advance? ---------- ☒ Yes ☐ No

## Emissions Unit Section

**5 –CCB Plant-BLOCK silo #1 (cement) w/silotop baghouse subject to 5% Opacity Limit**

**PART I: FILE REVIEW PRIOR TO INSPECTION** (check ☑ only one box for each question)

1. Date of last inspection: 01/27/2011
2. Past Visible Emissions (VE) tests:
   a. Was a VE test performed within each of the past 4 calendar years? ☒ Yes ☐ No
   b. Has a VE test been performed yet within the current calendar year? ☒ Yes ☐ No
   c. If first year of operation, was a VE test performed within 30 days of commencing operation? ☒ N/A ☐ Yes ☐ No
   d. Date of last VE test: 01/27/2011
   e. Was the VE test report filed with the compliance authority no later than 45 days after the test? ☒ Yes ☐ No
   f. Did the report state the actual silo loading rate during emissions testing? ☒ Yes ☐ No
   g. What was the actual silo loading rate? 27.2 tons/hour
   h. If weigh hopper(batcher) emissions controlled by the silo dust collector, did the report state whether or not batching occurred during emissions testing? ☒ N/A ☐ Yes ☐ No
   i. Did the test report state the actual batching rate during emissions testing? ☐ Yes ☒ No
   j. What was the actual batching rate? N/A tons/hour
   k. Did the emissions unit demonstrate compliance with the 5% opacity limit during the last VE test? ☒ Yes ☐ No
   If not, what was the problem (if known)? N/A

**PART II: STACK EMISSIONS from a silo, weigh hopper(batcher) or other enclosed storage and conveying equipment** (check ☑ only one box for each question)

**1. Was a visible emissions test conducted by the facility for this unit during this site visit?** ☒ Yes ☐ No

   a. Was the visible emissions test conducted according to EPA Method 9? ☒ Yes ☐ No
   b. The visible emission test resulted in an opacity of 0 % for the highest six-minute average.
   c. Did the visible emissions test demonstrate compliance with the 5% opacity limit? ☒ Yes ☐ No
   If not, what was the problem (if known)? N/A

   d. During visible emissions tests of the silo dust collector exhaust points was the loading of the silo conducted at a rate that is representative of the normal silo loading rate? ☒ Yes ☐ No ☐ N/A
   e. If silo loaded, was the minimum loading rate of 25 tons/hour achievable in practice? ☒ Yes ☐ No
   f. What was the silo loading rate? ~27 tons/hour
   g. Are emissions from the weigh hopper (batcher) operation controlled by the silo dust collector? ☐ Yes ☒ No
   *If YES, then continue on to questions g.1) – g.3) below. If answer NO, then skip g.1) – g.3) and go to h.*
      1) Was the weigh hopper (batcher) in operation during the visible emissions test? ☐ Yes ☐ No
      2) During the visible emissions test, was the batching rate representative of the normal batching rate and duration? ☐ Yes ☐ No
      3) What was the batching rate? _____ tons/hour . What was the batching duration? _____ minutes
   h. 1) If emissions from the weigh hopper (batcher) operation are controlled by a dust collector which is separate from the silo dust collector, was the visible emissions test of the weigh hopper (batcher) dust collector conducted while batching at a rate that is representative of the normal batching rate and duration? ☐ Yes ☐ No
      2) What was the batching rate? ****SEE COMMENTS SECTION****. What was the batching duration?

2. **Was a visible emissions test conducted by the inspector for this unit during this site visit?** ☐ Yes ☒ No
   a. Was the visible emissions test conducted according to EPA Method 9? ☐ Yes ☐ No
   b. The visible emission test resulted in an opacity of _____ % for the highest six-minute average.
   c. Did the visible emissions test demonstrate compliance with the 5% opacity limit? ☐ Yes ☐ No
   d. What was the process rate? _____ tons/hour.

## Emissions Unit Section

**6 –CCB Plant-BLOCK silo #2 (cement) w/silotop baghouse subject to 5% Opacity Limit**

**PART I: FILE REVIEW PRIOR TO INSPECTION** (check ☑ only one box for each question)

1. Date of last inspection: 01/27/2011
2. Past Visible Emissions (VE) tests:
   a. Was a VE test performed within each of the past 4 calendar years? ☒ Yes ☐ No
   b. Has a VE test been performed yet within the current calendar year? ☒ Yes ☐ No
   c. If first year of operation, was a VE test performed within 30 days of commencing operation? ☒ N/A ☐ Yes ☐ No
   d. Date of last VE test: 01/27/2011
   e. Was the VE test report filed with the compliance authority no later than 45 days after the test? ☒ Yes ☐ No
   f. Did the report state the actual silo loading rate during emissions testing? ☒ Yes ☐ No
   g. What was the actual silo loading rate? 25.3 tons/hour
   h. If weigh hopper(batcher) emissions controlled by the silo dust collector, did the report state whether or not batching occurred during emissions testing? ☒ N/A ☐ Yes ☐ No
   i. Did the test report state the actual batching rate during emissions testing? ☐ Yes ☒ No
   j. What was the actual batching rate? N/A tons/hour
   k. Did the emissions unit demonstrate compliance with the 5% opacity limit during the last VE test? ☒ Yes ☐ No
   If not, what was the problem (if known)? N/A

**PART II: STACK EMISSIONS from a silo, weigh hopper(batcher) or other enclosed storage and conveying equipment** (check ☑ only one box for each question)

**1. Was a visible emissions test conducted by the facility for this unit during this site visit?** ☒ Yes ☐ No

   a. Was the visible emissions test conducted according to EPA Method 9? ☒ Yes ☐ No
   b. The visible emission test resulted in an opacity of 0 % for the highest six-minute average.
   c. Did the visible emissions test demonstrate compliance with the 5% opacity limit? ☒ Yes ☐ No
   If not, what was the problem (if known)? N/A

   d. During visible emissions tests of the silo dust collector exhaust points was the loading of the silo conducted at a rate that is representative of the normal silo loading rate? ☒ Yes ☐ No ☐ N/A
   e. If silo loaded, was the minimum loading rate of 25 tons/hour achievable in practice? ☒ Yes ☐ No
   f. What was the silo loading rate? ~27 tons/hour
   g. Are emissions from the weigh hopper (batcher) operation controlled by the silo dust collector? ☐ Yes ☒ No
   *If YES, then continue on to questions g.1) – g.3) below. If answer NO, then skip g.1) – g.3) and go to h.*
      1) Was the weigh hopper (batcher) in operation during the visible emissions test? ☐ Yes ☐ No
      2) During the visible emissions test, was the batching rate representative of the normal batching rate and duration? ☐ Yes ☐ No
      3) What was the batching rate? _____ tons/hour . What was the batching duration? _____ minutes
   h. 1) If emissions from the weigh hopper (batcher) operation are controlled by a dust collector which is separate from the silo dust collector, was the visible emissions test of the weigh hopper (batcher) dust collector conducted while batching at a rate that is representative of the normal batching rate and duration? ☐ Yes ☐ No
      2) What was the batching rate? ****SEE COMMENTS SECTION****. What was the batching duration?

2. **Was a visible emissions test conducted by the inspector for this unit during this site visit?** ☐ Yes ☒ No
   a. Was the visible emissions test conducted according to EPA Method 9? ☐ Yes ☐ No
   b. The visible emission test resulted in an opacity of _____ % for the highest six-minute average.
   c. Did the visible emissions test demonstrate compliance with the 5% opacity limit? ☐ Yes ☐ No
   d. What was the process rate? _____ tons/hour.

## Facility Section (continued)

**CONFIRMATION OF GENERAL PERMIT ELIGIBILITY**

(check ☑ only one box for each question)

1. Does this facility keep records to show that it does not have the potential to emit:
   a. 10 tons per year or more of any hazardous air pollutant? ☒ Yes ☐ No
   b. 25 tons per year or more of any combination of hazardous air pollutants? ☒ Yes ☐ No
   c 100 tons per year or more of any other regulated air pollutant? ☒ Yes ☐ No

2. Does this facility include:
   a. Any emission units or activities not covered by the applicable air general permit (with the exception of units and activities that are exempt from permitting pursuant to subsection Rule 62-210.300(3) or Rule 62-4.040, F.A.C.)? ☐ Yes ☒ No
   If YES, what non-exempt units or activities? N/A

   b. Any emissions units or activities authorized by another air general permit where such other air general permit and this general permit specifically allow the use of one another at the same facility? ☐ Yes ☒ No
   If YES, what other general permit units or activities? N/A

*******Questions 3 and 4 below do not apply as there are no co-located facilities at the facility 1050350.*******

3. Is the total combined annual facility-wide fuel usage of all plants less than or equal to:
   a. 275,000 gallons of diesel fuel? ☐ Yes ☐ No
   b. 23,000 gallons of gasoline? ☐ Yes ☐ No
   c. 44 million standard cubic feet on natural gas? ☐ Yes ☐ No
   d. 1.3 million gallons of propane? ☐ Yes ☐ No
   e. Or an equivalent prorated amount if multiple fuels are used onsite (use equation below)? ☐ Yes ☐ No

$$\frac{\text{gal diesel/yr}}{275{,}000 \text{ gal diesel/yr}} + \frac{\text{gal gasoline/yr}}{23{,}000 \text{ gal gasoline/yr}} + \frac{\text{MM SCF nat. gas/yr}}{44 \text{ MM SCF nat. gas/yr}} + \frac{\text{MM gal propane/yr}}{1.3 \text{ MM gal propane/yr}} \leq 1.00?$$

4. Has the owner/operator maintained, available for inspection, site-wide records of monthly fuel consumption for each consecutive 12-period for the past 5 years? ☐ Yes ☐ No

**GENERAL CONDITIONS**

(check ☑ only one box for each question)

1. Has the owner or operator allowed the circumvention of any air pollution control device, or allowed the emission of air pollutants without the proper operation of all applicable air pollution control devices? ☐ Yes ☒ No
2. Does the owner or operator:
   a. Maintain the authorized facility in good condition? ☒ Yes ☐ No
   b. Ensure that the facility maintains its eligibility to use the air general permit and complies with all terms and conditions of the air general permit? ☒ Yes ☐ No
3. Has the owner or operator allowed you, as the duly authorized representative of the Department, access to the facility at reasonable times to inspect and test and to determine compliance with the air general permit and Department rules? ☒ Yes ☐ No

**RELOCATABLE PLANT:**

(check ☑ only one box for each question)

1. Is the facility: stationary ☒; relocatable ☐; or consisting of both stationary and relocatable ☐ concrete batching and/or nonmetallic mineral processing plants? (***If only stationary, skip the following question 2.)***

2. Is the relocatable concrete batching plant used to mix cement and soil for onsite soil augmentation or stabilization? ---------- ☐ Yes ☐ No

***(If YES, answer 2. a and 2 .b; if NO, answer question 2.c below. )***

a. Did the owner or operator notify the appropriate Department or Local Air Program by telephone, e-mail, fax, or written communication at least one business day prior to changing location? --------- ☐ Yes ☐ No

b. Did the owner or operator transmit a Facility Relocation Notification Form [DEP No. 62-210.900(6)] to the Department or Local Air Program no later than five business days following a relocation? ---- ☐ Yes ☐ No

c. Did the owner or operator transmit a Facility Relocation Notification Form [DEP No. 62-210.900(6)] to the appropriate Department or Local Air Program at least five business days prior to relocation? --- ☐ Yes ☐ No

3. If the relocatable plant was co-located at a facility with a separate air construction or air operation permit, and the relocatable batch plant is not included as an emissions unit in that separate permit:

a. Was the relocatable batch plant being used for a non-routine purpose (i.e, there is no repeated usage)? ☐ Yes ☐ No
If YES, what was the purpose?

b. Were records kept by the owner/operator to indicate how long it was co-located at the permitted facility? ---------- ☐ Yes ☐ No
If YES, were any periods more than 6 months in duration? ---------- ☐ Yes ☐ No

**CHANGES**

(check ☑ only one box for each question)

Administrative Changes:

1. Were there any changes in the name, address, or phone number of the facility or authorized representative not associated with a change in ownership or with a physical relocation of the facility or any emissions units or operations comprising the facility; or any other similar minor administrative change at the facility? ---- ☐ Yes ☒ No
2. If YES, did the facility provide written notification within 30 days of the change? ---------- ☐ Yes ☐ No

New or Modified Process Equipment or Change in Ownership:

3. Since the last registration form submittal has there been
   a. Installation of any new process equipment? ---------- ☐ Yes ☒ No
   b. Alterations to existing process equipment without replacement? ---------- ☐ Yes ☒ No
   c. Replacement of existing equipment with equipment that is substantially different? ---------- ☐ Yes ☒ No
   d. A change in ownership? ---------- ☐ Yes ☒ No

4. If the answer to any question 3a. – d. is YES, was a new registration form and the appropriate fee submitted 30 days prior to the change? ---------- ☐ Yes ☐ No

| | |
|---|---|
| Amaury Betancourt | 01/24/2012 |
| Inspector's Name (Please Print) | Date of Inspection |
| | 01/24/2015 |
| Inspector's Signature | Approximate Date of Next Inspection |

**COMMENTS:** Part I. Brief Summary of inspection/audit: I, Amaury Betancourt, conducted a site inspection and a visible emissions (VE) test audit at Cemex Four Corners Ready Mix & Block Plant (Facility ID 1050350) on 01/24/2012. I arrived at the facility at approximately 13:30 PM. The white cement and grey cement trucks were already at the facility when I arrived, and so was Mr. Bill Arlington of Arlington Environmental Services, Inc., who was there to conduct two (2) visible emissions (VE) tests, one for each of the two silos at the facility. The only two active emission units at the facility are EU005 and EU006.

The North silo, also known as silo #2, is listed in the permit as emission unit (EU) EU006, and was filled with white cement during the VE test. The South silo, also known as silo #1, is listed in the permit as EU005, and was filled with grey cement. I met with Mr.

Bill Arlington of Arlington Environmental Services, Inc. I also met with the Plant Manager, Mr. Mike Johnson, who was inside the building office, which is inside the building at the facility. Another operator was present inside the building with Mr. Johnson. I asked Mr. Johnson about the production of the facility. Mr. Johnson stated that the facility produced approximately 1.5 million units, or blocks, for calendar year 2011. Mr. Johnson explained that there are approximately 145 blocks per batch, and each batch weighs approximately 600 lbs. Therefore, the weight of each block is approximately 4 lbs. For calendar year 2011, this means that the production total was approximately 6 million pounds of blocks, which is approximately equivalent to 1.5 million blocks total.

I also asked Mr. Johnson about the fuel usage at the facility. Mr. Johnson stated that only diesel is used at the facility, and that the diesel tank holds approximately 9000 gallons of diesel and this tank is filled, at most, 4 times a year, for a total of approximately 36,000 gallons of diesel used per year at the facility.

Mr. Johnson explained that the weigh hopper (batcher) is inside the facility building. During batching, dust emissions are collected by an air emission control device on the weigh hopper (batcher). Dust emissions collected by the control device on the weigh hopper (batcher) are then sent back into one of the silos to be recycled.

For the VE test, Mr. Arlington and I positioned ourselves on the Southwest side of the building to have the sun behind us, since the white cement and grey cement silos are on the East side of the building. In total, one set of VE tests was conducted from approximately 13:45 to 14:15 PM, and this set of tests included a VE test for each of the two silos, EU005 (filled with grey cement) and EU006 (filled with white cement).

After the completion of the VE Test and before leaving the facility, Mr. Arlington and I entered the facility building to tell Mr. Johnson that we were leaving. Mr. Arlington pointed out to me the weigh hopper (batcher), and told me that the weigh hopper and batcher are actually two separate and different units. On this inspection checklist, the weigh hopper (batcher) is listed in the VE test section as if it were one (the same) unit. The dust collector for the weigh hopper and the batcher is located indoors at the facility and this dust collector is separate from the silo dust collectors for EU005 and EU006. Because the dust collector for the weigh hopper and the batcher is located indoors at the facility, no VE tests are required for this dust collector.

I called Mr. Johnson on Friday, February 3, 2012, in the early afternoon, and Mr. Johnson called me back around 16:00 PM. I asked Mr. Johnson what the approximate loading rates were for each of the silos on the inspection date, 01/24/2012, and Mr. Johnson stated that he did not know the exact loading rate of the silos, but that typically the cement trucks have about 27 tons, and the silos are loaded in about 45 minutes to an hour. I also asked Mr. Johnson if the dust collector for the weigh hopper and batcher sends the dust back to both silos, and he stated that the dust is sent back only to one of the silos and the dust is recycled in the process.

Part II. Comments on emission units (EUs): The only two active emission units at the facility are EU005 and EU006. During the VE tests and site inspection on 01/24/2012, no batching was occurring at the facility. The dust collector for the weigh hopper and the batcher is located indoors at the facility and this dust collector is separate from the silo dust collectors for EU005 and EU006. Because the dust collector for the weigh hopper and the batcher is located indoors at the facility, no VE tests are required for this dust collector.
####