

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

St. Mary's Cement, Inc. (U.S.)  
Attn: Larry Woodward  
12101 South Doty Avenue  
Chicago, Illinois 60633

Application No.: 82040005

I.D. No.: 031600BUN

Applicant's Designation:

Date Received: July 30, 2008

Subject: Cement Transfer Plant

Date Issued: January 16, 2009

Expiration Date: January 16, 2014

Location: 12101 South Doty Avenue, Chicago, 60633

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of

Five (5) Cement Silos Controlled by two (2) Baghouses  
Two (2) Truck Loadouts Controlled by two (2) Baghouses  
Cement Transfer System (Consisting of three (3) Bucket Elevators, Airslides, and Cement Holding Pit with Digger) Controlled by a Baghouse

pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Particulate Matter less than 10 microns (PM<sub>10</sub>)). As a result the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) for this location.
- 2a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit (i.e., any emission unit other than a fuel combustion emission unit) may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a

305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

- c. Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the emission source.
- d. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hour (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.
- e. Pursuant to 35 Ill. Adm. Code 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).
- f. Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324(d), no person shall cause or allow the emission into the atmosphere, of PM<sub>10</sub> from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period.
- g. Pursuant to 35 Ill. Adm. Code 212.700(a), 35 Ill. Adm. Code 212 Subpart U (Additional Control Measures) shall apply to those sources in the areas designated in and subject to 35 Ill. Adm. Code 212.324(a)(1) or 212.423(a) and that have actual annual source-wide emissions of PM<sub>10</sub> of at least fifteen (15) tons per year.
- 3. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, this subsection is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b).
- 4a. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324 shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:
  - i. Visual inspections of air pollution control equipment;

- ii. Maintenance of an adequate inventory of spare parts; and
  - iii. Expeditious repairs, unless the emission unit is shutdown.
- b. Pursuant to 35 Ill. Adm. Code 212.701(a), those sources subject to 35 Ill. Adm. Code 212 Subpart U shall prepare contingency measure plans reflecting the PM<sub>10</sub> emission reductions set forth in 35 Ill. Adm. Code 212.703. These plans shall become federally enforceable permit conditions. Such plans shall be submitted to the Illinois EPA by November 15, 1994. Notwithstanding the foregoing, sources that become subject to the provisions of 35 Ill. Adm. Code 212 Subpart U after July 1, 1994, shall submit a contingency measure plan to the Illinois EPA for review and approval within ninety (90) days after the date such source or sources became subject to the provisions of 35 Ill. Adm. Code 212 Subpart U or by November 15, 1994, whichever is later. The Illinois EPA shall notify those sources requiring contingency measure plans, based on the Illinois EPA's current information; however, the Illinois EPA's failure to notify any source of its requirement to submit contingency measure plans shall not be a defense to a violation of 35 Ill. Adm. Code 212 Subpart U and shall not relieve the source of its obligation to timely submit a contingency measure plan.
- c. Pursuant to 35 Ill. Adm. Code 212.703(a), all sources subject to 35 Ill. Adm. Code 212 Subpart U shall submit a contingency measure plan. The contingency measure plan shall contain two levels of control measures:
  - i. Level I measures are measures that will reduce total actual annual source-wide fugitive emissions of PM<sub>10</sub> subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.
  - ii. Level II measures are measures that will reduce total actual annual source-wide fugitive emissions of PM<sub>10</sub> subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.
- d. Pursuant to 35 Ill. Adm. Code 212.703(b), a source may comply with 35 Ill. Adm. Code 212 Subpart U through an alternative compliance plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions as required at 35 Ill. Adm. Code 212.703(a) and which has been approved by the Illinois EPA and USEPA as federally enforceable permit conditions. If a source elects to include controls on process emission units, fuel combustion emission units, or other fugitive emissions of PM<sub>10</sub> not subject to 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 at the source in its alternative control plan, the plan must include a reasonable schedule for implementation of such controls, not to exceed two (2) years. This implementation schedule is subject to Illinois EPA review and approval.
- e. Pursuant to 35 Ill. Adm. Code 212.704(b), if there is a violation of the ambient air quality standard for PM<sub>10</sub> as determined in accordance with 40 CFR Part 50, Appendix K, the Illinois EPA shall notify the source or sources the Illinois EPA has identified as likely to be causing or contributing to one or more of the exceedences leading to such violation, and such source or sources shall implement Level I or Level II measures, as determined pursuant to 35 Ill. Adm. Code 212.704(e). The source or sources so identified shall implement such measures

corresponding to fugitive emissions within ninety (90) days after receipt of a notification and shall implement such measures corresponding to any nonfugitive emissions according to the approved schedule set forth in such source's alternative control plan. Any source identified as causing or contributing to a violation of the ambient air quality standard for PM<sub>10</sub> may appeal any finding of culpability by the Illinois EPA to the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 106 Subpart J.

- f. Pursuant to 35 Ill. Adm. Code 212.704(e), the Illinois EPA shall require that sources comply with the Level I or Level II measures of their contingency measure plans, pursuant 35 Ill. Adm. Code 212.704(b), as follows:
  - i. Level I measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, is less than or equal to 170 ug/m<sup>3</sup>.
  - ii. Level II measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, exceeds 170 ug/m<sup>3</sup>.
- 5. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouses such that the baghouses are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
- 6a. Emissions and operation of the Cement Transfer Plant shall not exceed the following limits:

| Process         | Total              |                        | Pollutant        | Emission Factor | Emissions |             |
|-----------------|--------------------|------------------------|------------------|-----------------|-----------|-------------|
|                 | Cement<br>(Ton/Mo) | Throughput<br>(Ton/Yr) |                  |                 | (lb/Ton)  | (lb/Mo)     |
| Silo Loading    | 208,000            | 1,872,000              | PM               | 0.2             | 1,664.0   | 7.49        |
|                 |                    |                        | PM <sub>10</sub> | 0.2             | 1,664.0   | 7.49        |
| Truck Loadout   | 208,000            | 1,872,000              | PM               | 0.2             | 1,664.0   | 7.49        |
|                 |                    |                        | PM <sub>10</sub> | 0.2             | 1,664.0   | 7.49        |
| Cement Transfer | 208,000            | 1,872,000              | PM               | 0.0024          | 499.2     | 2.25        |
|                 |                    |                        | PM <sub>10</sub> | 0.0024          | 499.2     | 2.25        |
| Cement Digger   | 22,222             | 200,000                | PM               | 0.0024          | 53.3      | 0.24        |
|                 |                    |                        | PM <sub>10</sub> | 0.0024          | 53.3      | <u>0.24</u> |
| Totals:         |                    |                        | PM               |                 |           | 17.47       |
|                 |                    |                        | PM <sub>10</sub> |                 |           | 17.47       |

These limits are based on the maximum throughput rates, standard emissions factors (SCC 30500619 and 30500627, Factor Information Retrieval (FIRE) Version 6.25, September 2004), and 96% overall control for PM and PM<sub>10</sub> emissions.

- b. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

- 7a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
- i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
  - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
- b. Testing required by Condition 8 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
8. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
- 9a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- i. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).
  - ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall

include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.

- iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.
  - iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.
- 10a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Records addressing use of good operating practices for the baghouses:
    - A. Records for periodic inspection of the baghouses with date, individual performing the inspection, and nature of inspection; and
    - B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
  - ii. Cement received (tons/month and tons/year);
  - iii. Cement loadout (tons/month and tons/year); and
  - iv. Monthly and annual PM and PM<sub>10</sub> emissions from the source with supporting calculations (lbs/month and tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 11a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- b. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(4), copies of all records required by 35 Ill. Adm. Code 212.324 shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA.
  - ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois

EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.

12a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedances or deviation and efforts to reduce emissions and future occurrences.

b. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
9511 West Harrison  
Des Plaines, Illinois 60016

It should be noted that this permit has been revised to incorporate Construction Permit 08070064.

If you have any questions on this, please call George Kennedy at 217/782-2113.

Edwin C. Bakowski, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

Date Signed: \_\_\_\_\_

ECB:GMK:jws

cc: Illinois EPA, FOS Region 1  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from Cement Transfer Plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario, which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels (e.g., 100 tons per year of PM<sub>10</sub>) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

| <u>Equipment/Process</u> | <u>E M I S S I O N S (Tons/Yr)</u> |                        |
|--------------------------|------------------------------------|------------------------|
|                          | <u>PM</u>                          | <u>PM<sub>10</sub></u> |
| Cement Silo Loading      | 7.49                               | 7.49                   |
| Cement Truck Loadout     | 7.49                               | 7.49                   |
| Cement Transfer          | 2.25                               | 2.25                   |
| Cement Digger            | <u>0.24</u>                        | <u>0.24</u>            |
| Totals:                  | 17.47                              | 17.47                  |

GMK:jws