

AMENDED AGREED BOARD ORDER

LOUISVILLE METRO AIR POLLUTION CONTROL BOARD

Kosmos Cement Company

This Amended Order is issued by the Louisville Metro Air Pollution Control Board (Board) pursuant to Kentucky Revised Statutes Chapter 77 (Air Pollution Control). This Agreement is made by and between the Board and Kosmos Cement Company (Company), a Kentucky general partnership, and is effective on the date of its adoption by the Board.

COMPANY: Kosmos Cement Company - Louisville Plant
15301 Dixie Highway
Louisville, Kentucky 40272

REGULATIONS INVOLVED:

District Regulation 1.06: Stationary Source Self –Monitoring
District Regulation 3.01: Ambient Air Quality Standards

BACKGROUND AND DISCUSSION:

On August 5, 2013, the United States Environmental Protection Agency (U.S. EPA) designated a portion of the southwestern Louisville Metro area roughly bounded by Ethan Allen Way, Dixie Highway, the southern boundary of the Louisville Gas & Electric Company (LG&E) Mill Creek Electric Generating Station (Mill Creek) property, and the Ohio River as nonattainment for the 2010 1-hour Primary SO₂ National Ambient Air Quality Standard (NAAQS) of 75 parts per billion (ppb), effective October 4, 2013. *Air Quality Designations for the 2010 Sulfur Dioxide (SO₂) Primary National Ambient Air Quality Standard*, 78 Fed. Reg. 47191 at 47200 (August 5, 2013) (codified at 40 CFR 81.318).

Mill Creek is the sole source of SO₂ emissions within the nonattainment area described above. LG&E recently completed substantial improvements to the air pollution control equipment at Mill Creek. The Kentucky Division for Air Quality (DAQ) and the Louisville Metro Air Pollution Control District (District) conducted modeling of Mill Creek in accordance with the *Guidance for 1-Hour SO₂ Nonattainment Area SIP Submissions* Memorandum from Stephen D. Page, Director, Office of Air Quality Planning and Standards, U.S. EPA to Regional Air Division Directors, Regions 1-10 (April 23, 2014), that, with the improvements, did not predict emissions in excess of the 1-hour SO₂ NAAQS. All other sources impacting the nonattainment area were modeled and accounted for in background ambient monitoring data. On June 23, 2017, a 1-Hour SO₂ Plan for the Louisville/Jefferson County, Kentucky nonattainment area, which further discusses this modeling, was proposed to address emissions from Mill Creek and demonstrate that the area will

timely attain the 1-hour SO₂ NAAQS. U.S. EPA published final approval of the 1-hour SO₂ Plan for the area in the June 28, 2019 Federal Register (84 FR 30920). On October 3, 2019, the District released for public comment a Redesignation Request requesting that the nonattainment area be redesignated as attainment by U.S. EPA based on monitoring.

District Regulation 3.01, *Ambient Air Quality Standards*, Section 4 prohibits the emission of any air contaminant at levels or in such a way as would interfere with the maintenance of an ambient air quality standard. As a result of earlier modeling of the Kosmos Cement Company (Company) by DAQ and the District, which was conducted in accordance with *Guidance for 1-Hour SO₂ Nonattainment Area SIP Submissions*, the District has determined it is necessary to conduct ambient air quality monitoring to better characterize the ambient concentrations of SO₂ in the vicinity of Company's facility and determine whether those SO₂ emissions violate the SO₂ NAAQS outside the nonattainment area. At its April 19, 2017 meeting, the Board approved entry of an Agreed Board Order between Company and the District that called for the parties to implement an SO₂ Monitoring Plan and certain other related requirements in accordance with 40 CFR Part 58 and U.S. EPA's non-binding technical assistance document titled, "SO₂ NAAQS Designations Source-Oriented Monitoring Technical Assistance Document" (Monitoring TAD February 2016) as appropriate and in the professional judgment of the District ("2017" Agreed Board Order").

In 2019, the Company submitted a proposal to the District requesting agreement to amend the 2017 Agreed Board Order to include construction of a new kiln stack as an alternative to implementation of the SO₂ Monitoring Plan.

In November 2019, Company notified the District of its intent to transfer substantially all of its assets, including the Louisville Plant located at 15301 Dixie Highway, and "Kosmos Parcel" described herein, to Kosmos Cement Company LLC, an unrelated third party and subsidiary of Eagle Materials Inc. (the "Transferee"). This transaction is scheduled to close by March 31, 2020.

NOW THEREFORE BE IT ORDERED THAT:

1. Company shall comply with the SO₂ Monitoring Plan included as Attachment A and Public Access Control Plan included as Attachment B. The referenced Plans being the same plans approved as part of the 2017 Agreed Board Order.
2. In lieu of the requirements in Paragraph 1, Company may elect to construct a new kiln stack with an above grade height equal to or greater than 155 feet but not more than 170 feet with an inside stack exit diameter of 10.5 feet or less ("Kiln Stack") and shall comply with Attachment D. Company shall notify the District of its intent to construct a new kiln

stack in writing no later than March 31, 2020. The District may extend the deadline for a reasonable length of time for good cause as determined by the District.

3. This Order amends, supersedes and otherwise replaces the 2017 Agreed Board Order.
4. Upon closing of the sale of Company's Louisville Plant, including the "Kosmos Parcel" described herein to Transferee and transfer of the Company's District-issued Title V permit to Transferee, Transferee shall be substituted as the "Company" under this Order and all obligations and responsibilities hereunder shall immediately become binding upon Transferee, and Company shall be relieved of further responsibility or liability under this Order. Transferee has executed this Order for the sole purpose of acknowledging its agreement to be substituted as the "Company" hereunder and to be bound by the terms hereof upon closing of the sale of Company's Louisville Plant to Transferee and transfer of the Company's District-issued permit to Transferee. No other substitution of parties or transfer of responsibilities or obligations hereunder is authorized without the express approval of the District, and nothing herein shall be deemed to constitute advance approval of any permit transfer, all such transfers being subject to all applicable federal and state law or District regulations.
5. Nothing in this Order affects, limits or waives any permitting requirement to which Company is subject. If any of the measures that Company has undertaken or will undertake in accordance with this Order are subject to any permit requirement under federal or state law or District regulations, such measures shall remain subject to such permitting requirements.
6. Nothing in this Order affects, limits or waives the District's legal rights, remedies or causes of action based on statutes, regulations or permit conditions within the jurisdiction of the District, and Company reserves its rights and defenses thereto. The District expressly reserves its right to seek enforcement of this Order or to take further action through administrative orders or other means at any time and to take any other action it deems necessary, including the right to order all necessary remedial measures and assess penalties for proven violations of applicable laws or regulations, and Company reserves its defenses thereto. Nothing in this Order affects, limits or waives Company's legal rights, including Company's right to administrative or judicial review of any action by the District.
7. Neither this Order nor the actions taken hereunder shall constitute an admission by Company of any wrongdoing regarding any of the matters referenced in this Order.
8. Company has reviewed this Order and consents to all its requirements and terms.

9. In the event that it is necessary for the District to seek a court order to enforce this Order, Company agrees to pay filing fees and costs of such action.

Dated this 19th day of February, 2020.

Louisville Metro Air Pollution Control Board

Kosmos Cement Company

By: Carl E. Hilton
Carl E. Hilton
Chairman

By: _____
Dave Burris
Manager

Louisville Metro Air Pollution Control District

By: Keith H. Talley Sr
Matt King, P.E. Keith H. Talley Sr
Air Pollution Control Officer Director

Transferee (Kosmos Cement Company LLC) is executing this Order below for the sole purpose of acknowledging its agreement to be substituted as the "Company" hereunder and to be bound by the terms hereof upon closing of the sale of Company's Louisville Plant to Transferee and transfer of the Company's District-issued Title V permit to Transferee:

Kosmos Cement Company LLC

By: William R. Devlin
William R. Devlin
Vice President

Approved as to form and legality:
By: Stacy Fritze Dott
Stacy Fritze Dott
Assistant County Attorney

9. In the event that it is necessary for the District to seek a court order to enforce this Order, Company agrees to pay filing fees and costs of such action.

Dated this ___ day of _____, 2020.

Louisville Metro Air Pollution Control Board

Kosmos Cement Company

By: _____
Carl E. Hilton
Chairman

By: 
Dave Burris
Manager

Louisville Metro Air Pollution Control District

By: _____
Matt King, P.E.
Air Pollution Control Officer

Transferee (Kosmos Cement Company LLC) is executing this Order below for the sole purpose of acknowledging its agreement to be substituted as the "Company" hereunder and to be bound by the terms hereof upon closing of the sale of Company's Louisville Plant to Transferee and transfer of the Company's District-issued Title V permit to Transferee:

Kosmos Cement Company LLC

By: _____
William R. Devlin
Vice President

Approved as to form and legality:

By: _____
Stacy Fritze Dott
Assistant County Attorney

Attachment A

SO₂ Monitoring Plan

1. This SO₂ Monitoring Plan described herein shall be conducted in accordance with 40 CFR Part 58 and U.S. EPA's non-binding technical assistance document titled, "SO₂ NAAQS Designations Source-Oriented Monitoring Technical Assistance Document" (Monitoring TAD February 2016) as appropriate in the professional judgment of the District.
2. Company shall submit a siting and operation costs agreement to establish an air monitoring site for SO₂ and meteorological data to be located on the Kosmos parcel generally indicated on Attachment C to the District by June 1, 2017. Company agrees to pay the costs of establishing the monitoring site and associated equipment not to exceed \$75,000. Company shall also pay costs associated with establishing any necessary access roads and electrical power, including monthly costs for electricity thereafter. The air monitoring site shall be operated as a State and Local Air Monitoring Station (SLAMS) or equivalent, for the collection of SO₂ and meteorological data to begin January 1, 2018 or 6 months from the date the site monitor location is approved by U.S. EPA, whichever is later.
3. In the event U.S. EPA disapproves of site location of the monitoring site on the Kosmos parcel, Company agrees to pay the costs of establishing the monitoring site and associated equipment not to exceed \$75,000 in costs at an alternate location. Company shall also pay costs associated with establishing any necessary access roads and electrical power, including monthly costs for electricity thereafter. The air monitoring site shall be operated as a State and Local Air Monitoring Station (SLAMS) or equivalent, for the collection of SO₂ and meteorological data to begin January 1, 2018 or 6 months from the date the site monitor location is approved by U.S. EPA, whichever is later.
4. Company shall submit an air monitoring site access agreement, including ingress and egress, to the District no later than June 1, 2017, for physical access to the air monitoring site located on the Kosmos parcel.
5. The District shall develop all plans and submittals required for necessary approvals to site and operate the monitor under 40 CFR Part 58 with review and opportunity for written comment from the Company prior to submission to U.S. EPA. The District shall be responsible for all costs associated with this matter except as otherwise specifically provided in this Plan.
6. The District shall operate the air monitoring site to monitor SO₂ and meteorological data as necessary to obtain 3 years of quality-assured data, which shall be reported to the U.S.

EPA's Air Quality System. Monitoring data shall be shared with Company on a monthly basis.

7. Company shall take all steps necessary to remedy any impacts needed to meet the SO₂ NAAQS as identified by the District's ambient air monitoring as provided for in Paragraph 8 below.
8. If, at the conclusion of the three-year monitoring period, the three-year average of the annual (99th percentile) of the daily maximum 1-hour average concentrations exceeds the 1-hour SO₂ NAAQS as provided for under 40 CFR §50.17(b) and as determined in accordance with Appendix T of Part 50, Company shall submit a written plan of necessary remedial measures to the District for approval within 6 months of the conclusion of the three-year monitoring period and a final regulatory determination that the monitor is not in compliance. The plan shall include a list of remedial measures and a schedule of milestones, including the timely submittal of permit applications, leading to compliance with the SO₂ NAAQS within 30 months of submitting its written plan.
9. District monitoring shall continue until the end of the three-year monitoring period. The monitor may be shut down according to the generally applicable criteria of 40 CFR 58.14 upon approval from U.S.EPA.
10. Following completion of the monitoring period, Company shall retain ownership of all monitoring equipment Company purchased described herein. The District shall retain ownership of all District equipment, supplies, and similar items that are utilized at the site.

Attachment B

Public Access Control Plan

Kosmos Cement Plant Public Access Control Plan

1. The Company shall implement the Public Access Control Plan described herein by June 1, 2017.

Purpose

The purpose of this document is to describe the Public Access Control Plan that will be used to protect the general public from health and safety hazards incident to the industrial activities at the Kosmos Cement Company cement manufacturing plant ("Kosmos"). Kosmos operates a cement manufacturing plant on 1,100 acres pursuant to a Title V permit issued by the Louisville Metro Air Pollution Control District (LMAPCD) (the "Property"). This plan describes the access control plan that will be used to implement access restrictions to the Property.

Kosmos is fully committed to meeting the applicable ambient air quality standards (AAAQS) at the ambient air quality boundary of the Property. A primary purpose of this plan is to delineate the area to be protected and controlled for occupational health and safety within the Property boundary that is subject to unrestricted, general public access where the AAAQS are applicable). A secondary purpose is to ensure that measures are in place to restrict public access within the Property boundary.

General Information

The Property is located at 15301 Dixie Highway, Louisville, Kentucky. Kosmos operates kilns at the Property to produce Portland Cement. Currently, access to the Property is by three paved roads from Dixie Highway. There is a fence blocking access to the Property from the north, a natural barrier to the west of the Property (see shadows on attached Google picture), and limited access via fenced neighboring property to the south. The Property's western portion is bordered by Dixie Highway, a major thoroughfare where traffic conditions and absence of sidewalk prevent pedestrian access to the Property from the west.



Kosmos Cement manufacturing facility aerial view. Fence Lines (in red) and Natural Barriers

Public Access Control Measures

Physical Barriers

The Property encompasses approximately 1,100 acres. (See Figure 1). At the Dixie Highway intersection, public access to the Property via roads will be controlled by gates that will be locked when the road is not in use.

Posting

In addition to the physical barriers cited above, public access to the Property will be restricted using strategically located signs. Signs restricting public access and warning of potential health hazards will be posted at intersection of Dixie Highway and the gravel road. The sign specifications will be as follows:

- Each sign will be 2 feet by 4 feet and will be mounted on posts.
- Each sign will be inspected semi-annually and will be repaired or replaced, as necessary.
- Each sign will be free of visible obstructions.
- Each sign will read:

**CAUTION
RESTRICTED ACCESS
AMBIENT AIR QUALITY BOUNDARY
AUTHORIZED PERSONNEL ONLY
PLEASE CHECK IN WITH SECURITY**

Proposed Surveillance

There are surveillance cameras at the main entrances to the Property which are monitored 24 hours per day. For all operations, all on-site Kosmos employees will be informed of the air permitting requirements to maintain an exclusion zone at the Property. Employees will be asked to observe the location perimeter as they conduct their regular duties. Any suspected violation of the exclusion zone by unauthorized persons will be immediately reported to Kosmos management.

Kosmos employees will periodically observe the perimeter of the Property. If unauthorized person(s) are observed, a log of the time and date of the observation will be recorded on the attached form. A record of the completed logs will be maintained on location in the Kosmos office.

Trespass Individuals

If an employee observes unauthorized person(s) within the Property boundary, appropriate measures will be taken by the employee to address potential health and safety concerns. If safety is not of immediate concern, employees will be instructed to use the following protocol when dealing with unauthorized entry. A log of the incident will be recorded on the attached form and maintained on location by Kosmos.

- Approach the unauthorized individual(s) and from a safe distance request that they leave the Property immediately.
- If the unauthorized individual(s) refuse to leave the Property after the above request, the individual(s) will be informed that the police will be notified. Kosmos shall notify the police. If the individual is apprehended by the police employee will request the name or names of the unauthorized individual(s) from the police officer. The employee will promptly log the encounter with the unauthorized individual(s) on the surveillance form. The data to be logged in such a situation will include:
 1. Day and time;
 2. The name of the individual(s) (if known or otherwise provided);
 3. The method of entry into the Property (e.g. by foot, snow machine, etc.);
 4. Duration of unauthorized presence within the ambient air boundary; and
 5. Other pertinent information as appropriate.

The employee will also report such incidents to Kosmos management.

Attachment C

“KOSMOS PARCEL” MAP



Attachment D

Construction of Kiln Stack

1. In lieu of Paragraph 1 of the Amended Agreed Board Order, Company may construct a new Kiln Stack with an above grade height equal to or greater than 155 feet but no more than 170 feet with an inside stack exit diameter of 10.5 feet or less.
2. The Kiln Stack shall be constructed and in operation no later than 36 months following the adoption of the Amended Agreed Board Order by the Board (Operational Deadline).
3. On October 18, 2019, Company submitted modeling for a new Kiln Stack that demonstrated compliance with the NAAQS. If for any reason Company elects to construct a Kiln Stack with a different height than that used in the modeling submitted on this date, Company shall submit updated modeling that demonstrates compliance with the NAAQS for approval in writing from the District prior to construction. Any such submission shall not affect the Operational Deadline without good cause as determined by the District.
4. If construction or operation of the Kiln Stack is prevented, restricted or interfered with by reason of any act or condition beyond the reasonable control of Company, including but not limited to delays or circumstances preventing timely issuance of necessary permits or other authorizations, or third party challenges to a necessary authorization or other litigation or challenge relating to this matter, Company shall notify the District within 30 days of knowledge of such act or condition. Upon such notice, the District may approve an extension of the Operational Deadline in writing for a reasonable length of time or require Company to comply with Paragraph 1 of the Amended Agreed Board Order.
5. If the District approves an extension of the Operational Deadline pursuant to Paragraph 4 of this Attachment and construction or operation of the Kiln Stack remains prevented, restricted or interfered with by reason of any act or condition beyond the reasonable control of Company, including but not limited to delays or circumstances preventing timely issuance of necessary permits or other authorizations, or third party challenges to a necessary authorization or other litigation or challenge relating to this matter, Company shall notify the District within 30 days of knowledge of such act or condition. Upon such notice, the District may seek further amendment of the Amended Agreed Board Order or require Company to comply with Paragraph 1 of the Amended Agreed Board Order.
6. If construction or operation of the Kiln Stack is prevented, restricted or interfered with by reason of any act or condition within the reasonable control of Company, or Company fails to provide any required notice pursuant to this Attachment, the District may require Company to comply with Paragraph 1 of the Amended Agreed Board Order.

7. If the District requires Company to comply with Paragraph 1 of the Amended Agreed Board Order, pursuant to paragraphs 4, 5, or 6, the District shall inform Company in writing and Company agrees the air monitoring site described in Attachment A shall be in operation within 12 months of such notice. The District may extend the air monitoring site operational deadline for a reasonable length of time for good cause as determined by the District.

8. Upon adoption of the Amended Agreed Board Order, the District shall seek U.S. EPA approval to amend the Jefferson County portion of the Kentucky Ambient Air Monitoring Network Plan to remove the Kosmosdale monitor. Should the District require Company to comply with Paragraph 1 of the Amended Agreed Board Order after the Kosmosdale monitor has been removed, the District shall seek U.S. EPA approval to add the Kosmosdale monitor.