City of Indianapolis
DPW
Department of Public Works
Bart Peterson, Mayor

TO: Interested Parties / Applicant

RE: Kosmos Cement Company – Indianapolis Terminal / RR097-24448-00358

FROM: Felicia A. Robinson
Administrator

Notice of Decision: Approval - Registration

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Indianapolis Office of Environmental Services, Air Permits at (317) 327-2234.

Enclosures

Department of Public Works
Office of Environmental Services
2700 Belmont Avenue
Indianapolis, IN 46221
317-327-2234
Fax 327-2274
TDD 327-5186
indygov.org/dpw

June 25, 2007

Ms. Regina Henry
Kosmos Cement Company – Indianapolis Terminal
15301 Dixie Highway
Louisville, KY 40272

CERTIFIED MAIL 7000 0600 0023 5186 2521

Re: Registration Revision 097-24448-00358 to Registered Construction and Operation Status, R097-15472-00358

Dear Ms. Henry:

Kosmos Cement Company – Indianapolis Terminal was issued a Registration No. R097-15472-00358 on June 4, 2003 for a cement distribution terminal. An application from Kosmos Cement Company – Indianapolis Terminal requesting a revision pursuant to 326 IAC 2-5.5-6(g) was received on March 13, 2007. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following cement distribution terminal, located at 1051 South Emerson Avenue, Indianapolis, Indiana 46203, is classified as registered:

(a) One (1) silo, installed in 1968, with a maximum storage capacity of 1,000 tons, and two (2) portable storage bins each receiving approval to construct in 2007, each with a maximum storage capacity of 190 tons, identified as emission unit Silo Loading. The combined maximum silo loading rate and portable storage bin loading rate of dry cement product is 180 tons per hour. Emission unit Silo Loading utilizes one (1) cartridge filter baghouse identified as Silo Dust Collector and exhausts to Stack/Vent SV-01. The Silo Dust Collector is integral to the transfer of dry cement product.

(b) Truck loading operations, commencing in 1968, identified as emission unit Truck Loading, using paved concrete driveways, with a maximum throughput capacity of 320 tons per hour. Emission unit Truck Loading utilizes one (1) cartridge filter baghouse identified as Truck Loading Dust Collector and exhausts to Stack/Vent SV-02. The Truck Loading Dust Collector is integral to the transfer of dry cement product.

The following conditions shall be applicable:

(a) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:

(1) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the combined allowable particulate emission rate from Silo Loading and Truck Loading shall not exceed 63.7 pounds per hour when operating at a process weight rate of 320 tons per hour.

Department of Public Works
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2700 Belmont Avenue
Indianapolis, IN 46221
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The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

When the process rate weight rate exceeds two hundred (200) tons per hour, the allowable emissions may exceed that calculated from the above equation provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per thousand (1,000) pounds of gases.

The Silo Loading and Truck Loading baghouses identified as Silo Dust Collector and Truck Loading Dust Collector, respectively, shall be in operation at all times Silo Loading and Truck Loading is in operation, in order to comply with this limit.

(c) Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right of way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

This Registration is the second air approval issued to this source. The source is registered and may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Indiana Department of Environmental Management (IDEM) Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.1-2(f)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251

and

Office of Environmental Service
Compliance Data Group
City of Indianapolis
2700 S. Belmont Avenue
Indianapolis, IN 46221

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) and OES if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Felicia A. Robinson
Administrator

MBC

cc: File
Air Compliance – Matt Mosier
IDEM, OAQ – Mindy Hahn
Marion County Health Department

Registration
Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3).

Company Name:	**Kosmos Cement Company – Indianapolis Terminal**
Address:	**1051 South Emerson Avenue**
City:	**Indianapolis, Indiana 46203**
Phone #:	**(502) 933-6331**
Registration #:	**R097-15472-00358**

I hereby certify that Kosmos Cement Company – Indianapolis Terminal is still in operation and is in compliance with the requirements of Registration **R097-15472-00358**.

Name (typed):
Title:
Signature:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
CITY of INDIANAPOLIS
OFFICE OF ENVIRONMENTAL SERVICES

Technical Support Document (TSD) for a Registration Revision

Source Background and Description

Source Name:	**Kosmos Cement Company – Indianapolis Terminal**
Source Location:	**1051 South Emerson Avenue, Indianapolis, IN 46203**
County:	**Marion**
SIC Code:	**5032**
Operation Permit No.:	**R097-15472-00358**
Operation Permit Issuance Date:	**June 4, 2003**
Permit Revision No.:	**RR097-24448-00358**
Permit Reviewer:	**M. Caraher**

The Indiana Department of Environmental Management (IDEM) Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) have reviewed an application from Kosmos Cement Company – Indianapolis Terminal relating to the construction and operation of a cement distribution terminal operating under a Standard Industrial Classification (SIC) Code of 5032 (establishments primarily engaged in the wholesale distribution of cement).

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) One (1) silo, installed in 1968, with a maximum storage capacity of 1,000 tons, and two (2) portable storage bins each receiving approval to construct in 2007, each with a maximum storage capacity of 190 tons, identified as emission unit Silo Loading. The combined maximum silo loading rate and portable storage bin loading rate of dry cement product is 180 tons per hour. Emission unit Silo Loading utilizes one (1) cartridge filter baghouse identified as Silo Dust Collector and exhausts to Stack/Vent SV-01. The Silo Dust Collector is integral to the transfer of dry cement product.

(b) Truck loading operations, commencing in 1968, identified as emission unit Truck Loading, using paved concrete driveways, with a maximum throughput capacity of 320 tons per hour. Emission unit Truck Loading utilizes one (1) cartridge filter baghouse identified as Truck Loading Dust Collector and exhausts to Stack/Vent SV-02. The Truck Loading Dust Collector is integral to the transfer of dry cement product.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) Registration, R097-15472-00358, issued by the City of Indianapolis OES on June 4, 2003.

All conditions from previous approvals were incorporated into this permit.

Justification for the Revision

On March 13, 2007, this source submitted a Registration Revision application to increase the maximum storage capacity of cement by utilizing two (2) new portable cement storage bins. Each bin has a storage capacity of 190 tons. Cement will be transferred from road transport tankers into the portable storage bin(s), and then from these bin(s) into the existing 1,000 ton storage silo. Portable bin(s) filling will utilize the existing 1,000 ton storage silo cartridge filter baghouse. In addition, the source has requested the silo loading rate, which includes loading the two (2) new portable bins, be increased from 110 tons per hour to 180 tons per hour. The source also requested the truck loading rate, from the existing 1,000 ton cement storage silo, be increased from 110 tons per hour to 320 tons per hour.

The initial Registration for this source, R097-15472-00358, incorrectly determined the potential to emit regulated air pollutants from this source. The determination of the potential to emit PM and PM10 was determined utilizing the AP-42 Table 11.12-2 (Fifth Edition (1/95)) emission factor for truck loading at truck/central mix concrete plants of 0.02 pounds PM per ton material handled. This emission factor is for wet mixed materials being loaded into transport trucks not dry cement product. PM10 emissions were estimated to be equivalent to PM emissions. No emission estimates were included for silo loading. The determination of the potential to emit regulated air pollutants did not evaluate integral controls. The potential to emit PM/PM10 for R097-15472-00358 was determined to be 9.65 tons per year.

Registration, R097-15472-00358, is being modified through a Registration Revision, RR097-24448-00358. The Registration Revision is being performed pursuant to 326 IAC 2-5.5-6(g) because the revision incorporates applicable requirements. Specifically, 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 6-4 (Fugitive Dust Emissions) are applicable requirements for silo loading and truck loading operations at this source that should have been included in R097-15472-00358. This source performs mechanical transference or conveyance of a product and the potential to emit PM exceeds 0.551 pounds per hour (see Appendix A page 1 of 1). Therefore, 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) applies to silo loading and truck loading operations at this source.

This review, RR097-24448-00358, revises the existing potential to emit for the source prior to the revision and determines the potential to emit after the revision utilizing updated AP-42 emission factors for dry cement product loading and unloading (see Appendix A page 1 of 1).

Air Pollution Control Justification as an Integral Part of the Process

The company has submitted the following justification such that the Silo Loading Dust Collector and the Truck Loading Dust Collector shall each be considered as an integral part of emission unit Silo Loading and emission unit Truck Loading:

(a) Emission unit Silo Loading, which includes the two (2) portable storage bins, utilizes pneumatic conveying of product in order to transfer the cement product to storage. Therefore, control equipment is necessary for air/product separation. As a result, the pneumatic transfer of product cannot operate without the air/product separation Silo Loading Dust Collector.

(b) Operation of the Truck Loading Dust Collector serves a primary purpose other than pollution control and provides an overwhelming net economic benefit to operate the controls.

The dust collector, installed on the truck load out spout, filters the displaced air created by the truck loading process, and when the pulse jet cleaning system cleans the cartridge filters, the product falls down through the loading spout into the truck. This process reclaims product from the air that would otherwise be emitted into the atmosphere and

deposits it into the customer's truck, as product available for sale. There is no hopper or storage of pulse jet cleaned cement product. Therefore, the Truck Loading Dust Collector serves a primary purpose other than pollution control.

The installation cost of the Truck Loading Dust Collector was, approximately $30,000. The annual operating and maintenance cost for the Truck Loading Dust Collector is, approximately, $2500. At the retail price of $100 per ton of cement supplied and at a truck loading emission factor of 0.24 pounds of PM per ton of cement truck loaded (see Appendix A page 1 of 1), the annual cost benefit of recovering cement from the truck loading operation and depositing it into the customer's truck for sale is estimated as follows:

0.24 pounds PM/ton cement truck loaded x 110 tons cement loaded/hour x 8760 hours/year x ton/2000 pounds x $100/ton cement - $2500 operating cost/year = $9,063/year

IDEM, OAQ, and OES have evaluated the justifications and agree that the Silo Loading Dust Collector and the Truck Loading Dust Collector shall each be considered as an integral part of emission unit Silo Loading and emission unit Truck Loading. Therefore, the permitting level will be determined using the potential to emit after the Silo Loading Dust Collector and after the Truck Loading Dust Collector. Operating conditions in the proposed permit will specify that the Silo Loading Dust Collector and the Truck Loading Dust Collector shall operate at all times when emission unit Silo Loading and emission unit Truck Loading is in operation.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (^{o}F)
SV-01	Silo Loading Dust Collector	72.75	1.2	7000	ambient
SV-02	Truck Loading Dust Collector	15	0.5	2400	ambient

Recommendation

The staff recommends to the Administrator that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on March 13, 2007, with additional information received on March 22, 2007 and May 7, 2007. Information on integral controls was received on April 23, 2007 and May 14, 2007. An OES plant tour was conducted on May 7, 2007.

Emission Calculations

See Appendix A (page 1 of 1) of this document for detailed emission calculations.

Potential to Emit of the Source prior to the Revision with Integral Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, includling air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential to Emit (tons/yr)
PM	4.63
PM10	3.18
SO_2	0.00
VOC	0.00
CO	0.00
NO_x	0.00

HAPs	Potential to Emit (tons/yr)
NA	NA
Total	NA

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of regulated air pollutants are each less than five (5) tons per year. The initial Registration for this source, R097-15472-00358, incorrectly determined the potential to emit regulated air pollutants from the source to be 9.65 tons per year. Therefore, this source was issued a Registration on June 4, 2003, pursuant to the provisions of 326 IAC 2-5.5.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM2.5	nonattainment
PM10	attainment
SO_2	maintenance attainment
NO_2	attainment
8-hour Ozone	basic nonattainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_X) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(b) Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions, pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability for the source section.

(c) Marion County has been classified as attainment or unclassifiable in Indiana for PM10, SO_2, NO_2, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

(d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

(e) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Proposed Modification

PTE from the proposed modification (based on 8760 hours of operation per year at rated capacity including enforceable emission control where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO_2 (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO_x (ton/yr)
Proposed Modification	4.42	3.25	0.00	0.00	0.00	0.00
PSD or Offset Threshold Level	250	100	250	100	250	100

(a) This modification to an existing minor stationary source is not major because the emission increase is less than the PSD major source levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

(f) This modification to an existing minor stationary source is not major because the emission increase is less than the Emission Offset major source levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Source Status

Existing Source PSD, Emission Offset, Part 70, or FESOP Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	9.04
PM10	6.43
SO_2	0.00
VOC	0.00
CO	0.00
NO_x	0.00
Single HAP	0.00
Combination HAPs	0.00

(a) This existing source is not a major stationary source under 326 IAC 2-2 (PSD), because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories.

(b) This existing source is not a major stationary source under 326 IAC 2-3 (Emission Offset), because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or greater and it is not in one of the 28 listed source categories.

(c) These emissions were based on the Registration Revision application submitted by the company.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this Registration Revision, RR097-24448-00358, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons per year.

This status is based on all the air approvals issued to the source. This status has been verified by the OES inspector assigned to the source.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the revision for this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in the revision for this source.

State Rule Applicability – Entire Source

326 IAC 2-1.1-5 (Non-attainment New Source Review)

This source is not major under nonattainment NSR because it has the potential to emit less than 100 tons of PM10 (as a surrogate for PM2.5). Therefore, the Non-attainment New Source Review requirements are not applicable.

326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) and
326 IAC 2-3 (Emission Offset)

This source is not a major stationary source because no attainment regulated pollutant emissions are equal to or greater than two hundred fifty (250) tons per year, this source is not one of the 28 listed source categories under 326 IAC 2-2 or 326 IAC 2-3 and no nonattainment regulated pollutant emissions are equal to or greater than one hundred (100) tons per year. There have been no modifications or revisions to this source that were major modifications pursuant to 326 IAC 2-2 or 326 IAC 2-3. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) and 326 IAC 2-3 (Emission Offset) are each not applicable to the source.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this cement distribution terminal will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply to this source.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1(a)(1), (2), and (3), this source is not subject to 326 IAC 2-6 (Emission Reporting) because, as a Registration, it is not required to have an operating permit under 326 IAC 2-7, it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year, and it is not located in Lake or Porter Counties.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to the provisions of 326 IAC 6-4 for fugitive dust emissions. The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right of way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

326 IAC 6.5-1-2 (Particulate Matter Limitations Except Lake County) and 326 IAC 6.5-6 (Marion County)

This source has the potential to emit particulate of less than one hundred (100) tons per year and has actual emissions less than ten (10) tons per year. Kosmos Cement Company – Indianapolis Terminal is not specifically identified in 326 IAC 6.5-6 (Marion County). Therefore, 326 IAC 6.5-1-2 (Particulate Matter Limitations Except Lake County) and 326 IAC 6.5-6 (Marion County) does not apply to this source.

326 IAC 8 (Volatile Organic Compound Rules)

This source does not perform any activities specifically identified in 326 IAC 8 (Volatile Organic Compound Rules). Therefore, this source is not subject to 326 IAC 8 (Volatile Organic Compound Rules).

326 IAC 8-1-6 (General Volatile Organic Compound Reduction Requirements)

This source commenced construction and operation prior to January 1, 1980. Neither the source nor any specific emission unit at this source has the potential to emit twenty five (25) tons per year or more of volatile organic compounds (VOC). Therefore, this source is not subject to 326 IAC 8-1-6 (General Provisions Relating to VOC Rules: General Reduction Requirements for New Facilities).

326 IAC 11 (Emission Limitations for Specific Types of Operations)

This cement distribution terminal does not perform any specific type of operation identified in 326 IAC 11 (Emission Limitations for Specific Types of Operations). Therefore, this source is not subject to 326 IAC 11 (Emission Limitations for Specific Types of Operations).

326 IAC 12 (New Source Performance Standards)

See discussion under Federal Rule Applicability – Entire Source of this Technical Support Document.

326 IAC 14 (Emission Standards for Hazardous Air Pollutants)

There are no provisions under 326 IAC 14 (Emission Standards for Hazardous Air Pollutants) and 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants) applicable to any specific emission unit or operation at this source. Therefore, this source is not subject to the provisions of 326 IAC 14 (Emission Standards for Hazardous Air Pollutants) and 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).

326 IAC 20 (Hazardous Air Pollutants)

This source is not a major source of hazardous air pollutants (HAP) and does not perform operations specifically identified in 326 IAC 20. Therefore, this source is not subject to 326 IAC 20 (Hazardous Air Pollutants) and 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants).

State Rule Applicability – Individual Facilities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

This source performs mechanical transference or conveyance of a product and the potential emit PM exceeds 0.551 pounds per hour (see Appendix A page 1 of 1). Therefore, this source is subject to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the combined allowable particulate emission rate from Silo Loading and Truck Loading shall not exceed 63.7 pounds per hour when operating at a process weight rate of 320 tons per hour. The 326 IAC 6-3-2 limitation does not prohibit or limit simultaneous operation of portable bin filling, silo loading or truck loading at the permitted rates as specified in the **Permitted Emission Units and Pollution Control Equipment** section.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

When the process rate weight rate exceeds two hundred (200) tons per hour, the allowable emissions may exceed that calculated from the above equation provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per thousand (1,000) pounds of gases.

The Silo Loading and Truck Loading baghouses identified as Silo Dust Collector and Truck Loading Dust Collector, respectively, shall be in operation at all times Silo Loading and Truck Loading is in operation, in order to comply with this limit (see Appendix A page 1 of 1).

Registration Revision Changes

Change 1

The addition of the two (2) portable storage bins, the request to increase the loading rate and the request to increase the truck loading rate causes the following changes to the emission unit description:

(a) One (1) silo, installed in 1968, with a maximum storage capacity of 1,000 tons**, and two (2) portable storage bins each receiving approval to construct in 2007, each with a maximum storage capacity of 190 tons, identified as emission unit Silo Loading. The combined maximum silo loading rate and portable storage bin loading rate of dry cement product is 180 tons per hour. Emission unit Silo Loading utilizes one (1) cartridge filter baghouse identified as Silo Dust Collector and exhausts to Stack/Vent SV-01. The Silo Dust Collector is integral to the transfer of dry cement product.** ~~maximum throughput of 110 tons per hour, using a baghouse as control.~~

(b) Truck loading operations, commencing in 1968, **identified as emission unit Truck Loading,** using paved concrete driveways, with a maximum throughput capacity of **320** ~~110~~ tons per hour. Emission unit Truck Loading **utilizes one (1) cartridge filter baghouse identified as Truck Loading Dust Collector and exhausts to Stack/Vent SV-02. The Truck Loading Dust Collector is integral to the transfer dry cement product.**

Change 2

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 6-4 (Fugitive Dust Emissions) are each applicable requirements and should have been included in the initial Registration for this source. Each applicable requirement is added below as follows:

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the combined allowable particulate emission rate from Silo Loading and Truck Loading shall not exceed 63.7 pounds per hour when operating at a process weight rate of 320 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ **where E = rate of emission in pounds per hour and P = process weight rate in tons per hour**

When the process rate weight rate exceeds two hundred (200) tons per hour, the allowable emissions may exceed that calculated from the above equation provided

the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per thousand (1,000) pounds of gases.

The Silo Loading and Truck Loading baghouses identified as Silo Dust Collector and Truck Loading Dust Collector, respectively, shall be in operation at all times Silo Loading and Truck Loading is in operation, in order to comply with this limit.

(b) Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right of way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

Change 3

IDEM, OAQ has updated the mail address as follows:

An authorized individual shall provide an annual notice to the Indiana Department of Environmental Management (IDEM) Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.1-2(f)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251

Change 4

To minimize future changes to this Registration, the OAQ has deleted the name and/or title of the Authorized Individual from this Registration.

Conclusion

The operation of this cement distribution terminal shall be subject to the conditions of the Registration Revision RR097-24448-00358.

Appendix A: Emission Calculations
Bulk Storage/Truck Loading of Cement

Company Name: Kosmos Cement Company - Indianapolis Terminal
Address City IN Zip: 1051 South Emerson Avenue, Indianapolis, IN 46203
Permit Number: 097-24448-00358
Plt ID: 097-00358
Reviewer: M. Caraher
Date: 04/23/07

Existing Potential to Emit

	PM						PM10					
Cement Silo Filling tons per hour	PM Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	PM10 Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
110	0.72	79.20	346.90	99.00	0.79	3.47	0.46	50.60	221.63	99.00	0.51	2.22
Silo to Truck Loading tons per hour												
110	0.24	26.40	115.63	99.00	0.26	1.16	0.20	22.00	96.36	99.00	0.22	0.96
Total			**462.53**			**4.63**			**317.99**			**3.18**

Potential to Emit following the Revision

	PM						PM10					
Cement Silo Filling tons per hour	PM Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)	PM10 Emission Factor (lbs/ton)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
180	0.72	129.60	567.65	99.00	1.30	5.68	0.46	82.80	362.66	99.00	0.83	3.63
Silo to Truck Loading tons per hour												
320	0.24	76.80	336.38	99.00	0.77	3.36	0.20	64.00	280.32	99.00	0.64	2.80
Total			**904.03**			**9.04**			**642.98**			**6.43**
Potential to Emit of the Revision			**441.50**			**4.42**			**325.00**			**3.25**

Methodolgy

Cement Silo filling emission factor is from AP-42 Table 11.12.2 (June 2006)
Silo to truck loading is from FIRE SSC # 3-05-006-19 for dry loading of cement
PTE of PM/PM10 (lbs/hour) = Filling/Loading Rate (tons/hour) x Emission Factor (lbs/ton)
PTE of PM/PM10 (tons/year) = Filling/Loading Rate (tons/hour) x Emission Factor (lbs/ton) x 8760 hours/year x ton/2000 lbs
Controlled PM/PM10 Emission Rate = PTE x (1 - control efficiency)
Potential to Emit of the Revision = Potential to Emit following the Revision - Existing Potential to Emit