



Louisville Metro Air Pollution Control District
 850 Barret Avenue
 Louisville, Kentucky 40204-1745



Federally Enforceable District Origin Operating Permit (FEDOOP)

Permit No.: O-1369-14-F

Plant ID: 1369

Effective Date: __/__/2015

Expiration Date: __/__/2020

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

IMI South, LLC –Middletown
 12901 Avoca Road
 Louisville, KY 40223

The applicable procedures of District Regulation 2.17 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than twelve (12) months and no later than ninety (90) days prior to the expiration date.

Emission limitations to qualify for non-major status:

Pollutant: PM₁₀
 Tons/year: 25

Application No.: 67971

Application Received: 11/13/2014

Permit Writer: Bob Wesely

Date of Public Notice: 01/16/2015

{Manager1}
 Air Pollution Control Officer
 {date1}

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FEDOOP Permit Revisions/Changes

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
Initial	O-1369-14-F	__/__/2014	01/16/2015	Initial	Entire Permit	Initial Permit Issuance

Abbreviations and Acronyms

AP-42	- AP-42, <i>Compilation of Air Pollutant Emission Factors, published by U.S.EPA</i>
APCD	- Louisville Metro Air Pollution Control District
BAC	- Benchmark Ambient Concentration
BACT	- Best Available Control Technology
Btu	- British thermal unit
CEMS	- Continuous Emission Monitoring System
CFR	- Code of Federal Regulations
CO	- Carbon monoxide
District	- Louisville Metro Air Pollution Control District
EA	- Environmental Acceptability
gal	- U.S. fluid gallons
GHG	- Greenhouse Gas
HAP	- Hazardous Air Pollutant
HCl	- Hydrogen chloride
Hg	- Mercury
hr	- Hour
in.	- Inches
lbs	- Pounds
l	- Liter
LMAPCD	- Louisville Metro Air Pollution Control District
mmHg	- Millimeters of mercury column height
MM	- Million
NAICS	- North American Industry Classification System
NO _x	- Nitrogen oxides
PM	- Particulate Matter
PM ₁₀	- Particulate Matter less than 10 microns
PM _{2.5}	- Particulate Matter less than 2.5 microns
ppm	- parts per million
PSD	- Prevention of Significant Deterioration
psia	- Pounds per square inch absolute
QA	- Quality Assurance
RACT	- Reasonably Available Control Technology
SIC	- Standard Industrial Classification
SIP	- State Implementation Plan
SO ₂	- Sulfur dioxide
STAR	- Strategic Toxic Air Reduction
TAC	- Toxic Air Contaminant
UTM	- Universal Transverse Mercator
VOC	- Volatile Organic Compound
w.c.	- Water column
year	- Any period of twelve consecutive months, unless "calendar year" is specified
yr	- Year, or any 12 consecutive-month period, as determined by context

Preamble

This permit covers only the provisions of Kentucky Revised Statutes Chapter 77 Air Pollution Control, the regulations of the Louisville Metro Air Pollution Control District (District) and, where appropriate, certain federal regulations. The issuance of this permit does not exempt any owner or operator to whom it has been issued from prosecution on account of the emission or issuance of any air contaminant caused or permitted by such owner or operator in violation of any of the provisions of KRS 77 or District regulations. Any permit shall be considered invalid if timely payment of annual fees is not made. The permit contains general permit conditions and specific permit conditions. General conditions are applicable unless a more stringent requirement is specified elsewhere in the permit.

General Conditions

1. The owner or operator shall comply with all General Conditions herein and all terms and conditions in the referenced process/process equipment list.
2. All terms and conditions in this FEDOOP are enforceable by EPA, except those terms and conditions specified as District-only enforceable, and those which are not required pursuant to the Clean Air Act Amendments of 1990 (CAAA) or any of the Act's applicable requirements.
3. All application forms, reports, compliance certifications, and other relevant information submitted to the District shall be certified by a responsible official. If a change in the responsible official (RO) occurs during the term of this permit, or if an RO is added, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days of such change or addition.
4. The owner or operator shall submit an annual compliance certification, signed by the responsible official, to the District, on or before April 15 of the year following the year for which the certification applies. This certification shall include completion of District Form 9440-O.
5. Periodic testing, instrumental monitoring, or non-instrumental monitoring, which may include record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstrating continuing compliance with the terms and conditions of this permit.
6. The owner or operator shall retain all records required by the District or any applicable requirement, including all required monitoring data and supporting information, for a period of five years from the date of the monitoring, sampling, measurement, report, or application, unless a longer time period for record retention is required by the District or an applicable requirement. Records shall be retrievable within a reasonable time and made available to the District, Kentucky Division for Air Quality, or the EPA upon request.
7. The owner or operator shall provide written notification to the District, and receive approval, prior to making any changes to existing equipment or processes that would result in emissions of any regulated pollutant in excess of the allowable emissions specified in this permit.
8. This permit may be reissued, revised, reopened, or revoked pursuant to District Regulation 2.17. Repeated violations of permit conditions are sufficient cause for revocation of this permit. The filing of a request by the owner or operator for any reissuance, revision, revocation, termination, or a notification of planned changes in equipment or processes, or anticipated noncompliance shall not alter any permit requirement.
9. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed either 10 tons per year, or such lesser quantity as

the EPA has established by rule, of any one Hazardous Air Pollutant (HAP) or 25 tons per year of all HAPs combined. Fugitive HAP emissions shall be included in this limit. HAPs are listed in Section 112(b) of the CAAA and as amended in 40 CFR 63, Subpart C.

10. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed 100 tons per year of any regulated pollutant, including particulate matter, PM₁₀, PM_{2.5}, sulfur dioxide, carbon monoxide, nitrogen oxides, lead, hydrogen sulfide, gaseous fluorides, total fluorides, or Volatile Organic Compounds (VOC); any pollutant subject to any standard in District Regulation 7.02; any substance listed in sections 112(r), 602(a) and 602(b) of the CAAA; or any combination of greenhouse gasses whose combined global warming potential equals or exceeds 100,000 tons CO₂-equivalent, as defined in 40 CFR 98). Fugitive emissions shall be included in these limits for source categories listed in District Regulation 2.16.
11. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month.
12. Unless specified elsewhere in this permit, the owner or operator shall submit annual reports demonstrating compliance with the emission limitations specified. The report shall contain monthly and consecutive 12-month totals for each pollutant that has a federally enforceable limitation on the potential to emit. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement or a declaration that there were no such deviations. All annual compliance reports shall include the statement "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete" and the signature and title of a responsible official of the company. The report must be postmarked no later than March 1 of the year following the calendar year covered in the annual report.
13. The owner or operator shall comply with all applicable requirements of the following federally enforceable District Regulations:

Regulation	Title
1.01	General Application of Regulations and Standards
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance with Emissions Standards and Maintenance Requirements
1.06	Source Self-Monitoring, Emissions Inventory Development and Reporting
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning

Regulation	Title
1.14	Control of Fugitive Particulate Emissions
2.01	General Application (Permit Requirements)
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements
2.07	Public Notification for Title V, PSD, and Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.17	Federally Enforceable District Origin Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions

14. The owner or operator shall comply with all applicable requirements of the following District-only enforceable regulations:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors in the Ambient Air
2.08	Fees
5.00	Definitions
5.01	General Provisions
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
5.14	Hazardous Air Pollutants and Source Categories
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants
7.02	Adoption of Federal New Source Performance Standards

15. The owner or operator shall submit emission inventory reports, as required by Regulation 1.06, if so notified by the District.

16. The owner or operator shall submit timely reports of abnormal conditions or operational changes that may cause excess emissions, as required by Regulation 1.07.
17. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit shall be submitted to:

*Air Pollution Control District
Room 205
850 Barret Ave
Louisville, KY 40204-1745*

Emission Unit U1: Ready Mix Concrete Batch Plant

U1 Unit Description: Combination Wet/Dry Ready Mix Concrete Batch Plant

One (1) Erie-Strayer, model 7265, central (wet) mix/one (1) Stephens truck (dry) mix, combination central/truck mix ready-mix concrete batch plant, maximum rated capacity of 200 yd³/hr(wet mix) or 120 yd³/hr(dry mix), with two (2) cement silos, one (1) flyash silos, one (1) slag silo, one (1) outside conveyor, for filling overhead bins, overhead aggregate/sand bins, aggregate/sand weigh hopper, batch transfer conveyor, cement/flyash weigh hopper, central mixer, one (1) 2.5 mmbtu/hr natural gas fueled hot water heater, and one (1) Stephens baghouse central dust collector system, model SOS8000. ¹

U1 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.14	Control of Fugitive Particulate Emissions	All
2.17	Federally Enforceable District Origin Operating Permit	All
7.08	Standards of Performance for New Process Operations	1, 2, and 3

U1 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
E1	Agg/sand conveyor loading hoppers (4) combined capacity, 330 tn/hr	1.14, 2.17, 7.08	None	NA	2000
E2	Agg/sand bins loading conveyor, 420 tn/hr	1.14, 2.17, 7.08	None	NA	2000
E3	Aggregate storage, 420 tn/hr	1.14, 2.17, 7.08	None	NA	2000
E4	Cement silo #1, 90 tn capacity	1.14, 2.17, 7.08	C1	S1	2000
E5	Flyash silo #1, 90 tn capacity	1.14, 2.17, 7.08	C1	S1	2000
E6	Cement silo #2, 76 tn capacity	1.14, 2.17, 7.08	C1	S1	2000
E7	Slag silo #1, 46 tn capacity	1.14, 2.17, 7.08	C1	S1	2000

¹Concrete ready mix batch plant equipment was previously permitted under permit 146-00-O and the central dust collector system was permitted under permit 330-03-O.

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
E8	Flyash storage, 280 tn capacity ²	1.14, 2.17, 7.08	C1	S1	2000
E9	Aggregate weigh batcher, 360 tn/hr capacity	1.14, 2.17, 7.08	None	NA	2000
E10	Cement weigh batcher, 50 tn/hr capacity	1.14, 2.17, 7.08	C1	S1	2000
E11	Erie-Strayer central mix (wet) batch plant, 200 yd ³ /hr capacity	1.14, 2.17, 7.08	C1	S1	2000
E12	Stephens transit/mixer truck (dry) batch plant, 120 yd ³ /hr capacity	1.14, 2.17, 7.08	C1	S1	2000
E13	Aggregate/sand transfer conveyor, 360 tn/hr capacity	1.14, 2.17, 7.08	None	NA	2000

U1 Control Devices:

Control ID	Description	Control Efficiency	Performance Indicator	Stack ID
C1	One (1) central dust collection system baghouse, Stephens, model SOS8000, with 15,000 cfm capacity ³	99.8%	N/A	S1

² FEDOOP application listed the 280 tn flyash silo as not in use.

³ Information received from source 11/13/14.

U1 Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. PM/PM₁₀

- i. The owner or operator shall not allow the total plant-wide emissions of the pollutant PM₁₀ to equal or exceed twenty-five (25.0) tons per twelve (12) consecutive month period.^{4,5} (Reg. 2.17, section 5.1)
- ii. The owner or operator shall not allow or cause the particulate emissions TSP to exceed the permitted limitation of twenty (20) tons per year for the concrete batch plant. (Construction Permit 146-00-C, effective 4/7/2000)
- iii. The owner or operator shall not allow any materials to be handled, transported or stored; or access roads to and from the plant site, roads on the plant site property and the on-site work areas of the plant site, to be used without taking reasonable precautions to prevent particulate matter from becoming airborne beyond the work site, per Attachment A, Fugitive Dust Control Plan. (Reg. 1.14, section 2.1)
- iv. The owner or operator shall not allow the emissions of the pollutant PM emitted from the aggregate/sand bin loading conveyor fill hopper, emission point E1, to equal or exceed 2.34 lb/hr, based on actual operating hours on a calendar day.⁶ (Construction permit 146-00-C, eff. 4/7/00)
- v. The owner or operator shall not allow the emissions of the pollutant PM emitted from the aggregate/sand bin loading conveyor, emission point E2, to equal or exceed 2.34 lb/hr, based on actual operating hours on a calendar day.⁶ (Construction permit 146-00-C, eff. 4/7/00)
- vi. The owner or operator shall not allow the emissions of the pollutant PM emitted from the aggregate/sand weigh hopper, emission point E9, to equal or exceed 2.34 lb/hr, based on actual operating hours on a calendar day.⁶ (Construction permit 146-00-C, eff. 4/7/00)
- vii. The owner or operator shall not allow the emissions of the pollutant PM emitted from the cement/cement supplement weigh hopper, emission point E10, to equal or exceed 2.34 lb/hr, based on actual operating hours on a calendar day.⁶ (Construction permit 146-00-C, eff. 4/7/00)

⁴ The source requested the total plantwide limits of the criteria pollutants PM₁₀ < 25 tn/yr, Total HAPs < 12.5 tn/yr and largest single HAP < 5.0 tn/yr to be a FEDOOP STAR Exempt source as defined by Regulation 5.00, section 1.13.5, on 11/13/14.

⁵ The source is not major for Green House Gases.

⁶ Emissions calculations used emission factors from AP-42, table 11.12-2 and table 11.12-8. Uncontrolled emissions for the pollutant PM do not exceed the standard.

- viii. The owner or operator shall not allow the emissions of the pollutant PM emitted from the aggregate/sand transfer conveyor, emission point E13, to equal or exceed 2.34 lb/hr, based on actual operating hours on a calendar day. ⁷ (Construction permit 146-00-C, eff. 4/7/00)
- ix. The owner or operator shall operate the controls at all times that a process cement silo filling operation is performed, so that the emissions of the pollutant PM emitted from each of the process cement silos, emission points E4 and E6, do not equal or exceed 2.34 lb/hr, based on actual operating hours on a calendar day. ⁸ (Construction permit 146-00-C, eff. 4/7/00)
- x. The owner or operator shall operate the controls at all times that a cement supplement silo filling operation is performed, so that the emissions of the pollutant PM emitted from the each cement supplement silos, emission points E5, E7 and E8, do not equal or exceed 2.34 lb/hr, based on actual operating hours on a calendar day. ⁸ (Construction permit 146-00-C, eff. 4/7/00)
- xi. The owner or operator shall operate the controls at all times that the mixer filling operation is performed, so that the emissions of the pollutant PM emitted from the central mixer loading, emission point E11, do not equal or exceed 2.34 lb/hr, based on actual operating hours on a calendar day. ⁸ (Construction permit 146-00-C, eff. 4/7/00)
- xii. The owner or operator shall operate the controls at all times that the mix/transit truck loading operation is performed, so that the emissions of the pollutant PM emitted from the mix/transit truck loading, emission point E12, does not equal or exceed 2.34 lb/hr, based on actual operating hours on a calendar day. ⁸ (Construction permit 146-00-C, eff. 4/7/00)

b. Opacity

The owner or operator shall not allow visible emissions to equal or exceed twenty percent (20%) opacity for processes that commenced construction after September 1, 1976. (Reg. 7.08, section 3.1.1)

⁷ Emissions calculations used emission factors from AP-42, table 11.12-2 and table 11.12-8. Uncontrolled emissions for the pollutant PM do not exceed the standard.

⁸ Uncontrolled emissions of the pollutant PM can exceed the PM lb/hr standard of construction permit 146-00-C.

S2. Monitoring and Record Keeping (Regulation 2.17, section 5.2)

The owner or operator shall maintain the following records for a minimum of five (5) years and make the records readily available to the District upon request.

a. PM/PM₁₀

- i. The owner or operator shall monthly, perform a visual inspection of the structural and mechanical integrity of the process equipment for signs of damage, air leakage, corrosion, etc. and repair shall be performed as needed. The emissions points to be surveyed shall include, but not be limited to, the emission points listed below:
 - 1) Aggregate/sand bin loading conveyor fill hopper
 - 2) Aggregate/sand bin loading conveyor
 - 3) Aggregate/sand weigh hopper
 - 4) Aggregate/sand transfer conveyor
 - 5) Cement/cement supplement weigh hopper
 - 6) Cement silo filling
 - 7) Cement supplement silo filling
 - 8) Central mixer loading
 - 9) Mix/transit truck loading
- ii. The owner or operator shall keep records, monthly of the visual inspection of the structural and mechanical integrity of the process equipment.
- iii. The owner or operator shall maintain records monthly of the below listed items:
 - 1) The monthly and the monthly twelve (12) consecutive month period totals of cubic yards of concrete produced.
 - 2) The owner or operator shall calculate and record, during the first thirty calendar days of the following month, the monthly twelve (12) consecutive month plant-wide total emissions of the pollutant PM₁₀. All totals shall include PM₁₀ emitted during control bypasses.
 - 3) The owner or operator shall calculate and record, during the first thirty calendar days of the following month, the monthly twelve (12) consecutive month plant-wide total emissions of the pollutant PM. All totals shall include PM emitted during control bypasses.

- 4) The owner or operator shall use the below listed AP-42, Concrete Batching, emission factors when calculating the controlled plant-wide emissions for the pollutant PM₁₀, or other emission factors that become available, as approved by District.⁹

Equipment	AP-42 Emission Factor, lb PM₁₀/tn	Controlled PM₁₀ Emission Factor converted to lb PM₁₀/yd³ dry concrete
Aggregate Transfer	0.0033	0.0031
Sand Transfer	0.00099	0.0007
Weight hopper (Agg+Sand) ^a	0.00014	0.00023
Mixer loading (cem+cem suppl) ^b	0.0055	0.0016
Mix/transit truck loading (cem+cem suppl) ^b	0.0263	0.0074
Cement silo filling	0.00034	0.00008
Cement supplement silo filling	0.0049	0.0002
Aggregate ground storage	NA	0.0031
Sand ground storage	NA	0.0007
Aggregate hopper loading	NA	0.0031
Sand hopper loading	NA	0.0007

- 5) The owner or operator shall use the below listed AP-42, Concrete Batching, emission factors when calculating the uncontrolled plant-wide emissions for the pollutant PM₁₀, or other emission factors that become available, as approved by District.⁹

Equipment	AP-42 Emission Factor Uncontrolled (lb PM₁₀/tn)	Uncontrolled PM₁₀ Emission Factor converted to lb PM₁₀/yd³ dry concrete mix
Aggregate Transfer	0.0033	0.0031
Sand Transfer	0.00099	0.0007
Weight hopper (Agg+Sand) ^a	0.0028	0.0046
Mixer loading (cem+cem suppl) ^b	0.156	0.044
Mix/transit truck loading (cem+cem suppl) ^b	0.310	0.0874
Cement silo filling	0.47	0.1152
Cement supplement silo filling	1.10	0.041
Aggregate ground storage	NA	0.0031
Sand ground storage	NA	0.0007

⁹ The PM/PM₁₀ emissions factors are from or were derived from AP-42, Chapter 11.12, Concrete Batching, tables 11.12-2 and 11.12-8, and the standard concrete mix proportions listed in AP-42, chapter 11.12.

Equipment	AP-42 Emission Factor Uncontrolled (lb PM₁₀/tn)	Uncontrolled PM₁₀ Emission Factor converted to lb PM₁₀/yd³ dry concrete mix
Aggregate hopper loading	NA	0.0031
Sand hopper loading	NA	0.0007

^aThe unit for weigh hopper emission factor is lb of pollutant per ton of aggregate and sand, AP-42, table 11.12-2, footnote e.

^bThe unit for central mixer loading emission factor is lb of pollutant per ton of cement and flyash, AP-42, table 11.12-2, footnote f.

- 6) The owner or operator shall use the below listed AP-42, Concrete Batching, emission factors when calculating the controlled plant-wide emissions for the pollutant PM, or other emission factors that become available, as approved by District.¹⁰

Equipment	AP-42 PM Emission Factor, Controlled lb PM/tn	Controlled PM Emission Factor converted to lb PM/yd³ dry concrete
Aggregate Transfer	0.0069	0.0063
Sand Transfer	0.00021	0.0015
Weight hopper (Agg+Sand) ^a	0.00024	0.0004
Mixer loading (cem+cem suppl) ^b	0.0184	0.0052
Mix/transit truck loading (cem+cem suppl) ^b	0.098	0.0276
Cement silo filling	0.00099	0.00024
Cement supplement silo filling	0.0089	0.0003
Aggregate ground storage	NA	0.0064
Sand ground storage	NA	0.0015
Aggregate hopper loading	NA	0.0064
Sand hopper loading	NA	0.0015

- 7) The owner or operator shall use the below listed AP-42, Concrete Batching, emission factors when calculating the uncontrolled plant-wide emissions for the pollutant PM, or other emission factors that become available, as approved by District.¹⁰

¹⁰ The PM/PM₁₀ emissions factors are from or were derived from AP-42, Chapter 11.12, Concrete Batching, tables 11.12-2 and 11.12-8, and the standard concrete mix proportions listed in AP-42, chapter 11.12.

Equipment	AP-42 Emission Factor Uncontrolled (lb PM/tn)	Uncontrolled PM₁₀ Emission Factor converted to lb PM/yd³ dry concrete mix
Aggregate Transfer	0.0069	0.0063
Sand Transfer	0.00021	0.0015
Weight hopper (Agg+Sand) ^a	0.0048	0.0079
Mixer loading (cem+cem suppl) ^b	0.572	0.161
Mix/transit truck loading (cem+cem suppl) ^b	1.118	0.315
Cement silo filling	0.73	0.179
Cement supplement silo filling	3.14	0.116
Aggregate ground storage	NA	0.0064
Sand ground storage	NA	0.0015
Aggregate hopper loading	NA	0.0064
Sand hopper loading	NA	0.0015

^aThe unit for weigh hopper emission factor is lb of pollutant per ton of aggregate and sand, AP-42, table 11.12-2, footnote e.

^bThe unit for central mixer loading emission factor is lb of pollutant per ton of cement and flyash, AP-42, table 11.12-2, footnote f.

- iv. The owner or operator shall maintain daily records of any periods of time where the process was operating and the control device was not operating or a declaration that the control device operated at all times that day when the process was operating.
- v. For emission points E4, E5, E6, E7, E8, E11, and E12, if there is any time that the control devices are bypassed or not in operation when the process is operating, the owner or operator shall keep a record of the following for each bypass event:
 - 1) Date;
 - 2) Start time and stop time;
 - 3) Throughput at emission points E4, E5, E6, E7, E8, E11, and E12 during the hours their respective controls are bypassed;
 - 4) Identification of the control device and the uncontrolled emission point(s);
 - 5) PM emissions in lb/hr during the bypass;
 - 6) Summary of the cause or reason for each bypass event;
 - 7) Corrective action taken to minimize the extent or duration of the bypass event; and
 - 8) Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.

b. Opacity

- i. The owner or operator shall conduct a monthly 1-minute visible emissions survey, during normal operation, of the emission points. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure. The emission points to be surveyed shall include, but not be limited to, the emissions points listed below:
 - 1) Aggregate/sand bin loading conveyor fill hopper
 - 2) Aggregate/sand bin loading conveyor
 - 3) Aggregate/sand weigh hopper
 - 4) Aggregate/sand transfer conveyor
 - 5) Cement/cement supplement weigh hopper
 - 6) Cement silos
 - 7) Cement supplement silos
 - 8) Central mixer loading
 - 9) Mixer truck loading
- ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight (8) hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 test, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.
- iii. The owner or operator shall maintain records, monthly, of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what, if any, corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

S3. Reporting (Regulation 2.17, section 5.2)

The owner or operator shall submit annual compliance reports that include the information in this section. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement. The compliance reports shall be postmarked within 60 days following the end of each reporting period. All compliance reports shall include the following certification statement per Regulation 2.17, section 3.5.

- “Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete.”

- Signature and title of the responsible official of the company.

The Annual Compliance Report is due on or before the following date of each calendar year: ¹¹

<u>Reporting Period</u>	<u>Report Due Date</u>
January 1 st through December 31 st	March 1 st

The Annual Compliance Certification is due on or before the following date of each calendar year: ¹²

<u>Reporting Period</u>	<u>Report Due Date</u>
January 1 st through December 31 st	April 15 th

If a change in the “Responsible Official” (RO) occurs during the term of this permit, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days following the date a change in the designated RO occurs for this facility.

a. **PM/PM₁₀**

- i. The owner or operator shall report the monthly twelve (12) consecutive month period totals of plant-wide emissions of the pollutant PM₁₀. All totals shall include PM₁₀ emitted during control bypasses.
- ii. The owner or operator shall report the monthly twelve (12) consecutive month period totals of plant-wide emissions of the pollutant PM. All totals shall include PM emitted during control bypasses.
- iii. The owner or operator shall report the following information regarding each emission points’, E4, E5, E6, E7, E8, E11, and E12, PM By-Pass Activity in the annual compliance reports:
 - 1) Emission point at which the by-pass occurred;
 - 2) Date and duration (including the start and stop time) during which a bypass occurred;
 - 3) The average PM lb/hr emitted at each emission point during the bypass;
 - 4) Summary information on the cause or reason for the by-pass activity
 - 5) Corrective action taken to minimize the extent and duration of each bypass event;

¹¹ The Annual Compliance Report is due each year and shall include all emissions and throughput data required to be reported by the permit to show compliance with the standards of the permit.

¹² The Annual Compliance Certification is due each year and shall include the information required in the FEDOOP Annual Compliance Certification form 9440-O.

- 6) Measures implemented to prevent reoccurrence of the situation that resulted in by-pass emissions; or
- 7) If no deviations occur during the annual reporting period, the report shall contain a negative declaration.

b. Opacity

- i. The date, time and results of each visible emissions survey conducted that resulted in visible emissions being observed. If no visible emissions were observed during the reporting period, the owner or operator may submit a negative declaration.
- ii. The date, time and results of each Method 9 test conducted. If there were no Method 9 tests performed during the reporting, the owner or operator may submit a negative declaration.
- iii. Description of any corrective action taken for each exceedance of the opacity standard.

Insignificant Activities

Equipment	Quan.	PTE (tpy)	Regulation Basis
2.5 mmbtu/hr natural gas fuel hot water heater, Raypack, model H3-2500	1	1.07 NO _x	Regulation 1.02, section 1.23
Tanks for the storage of lubricating oils or fuel oils, with a vapor pressure less than 10 mm of Hg at conditions of 26°C and 760 mm Hg. Includes 8,000 gal diesel fuel storage tank.	5	0.01 VOC	Regulation 1.02, Appendix A

- 1) Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements.
- 2) Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements.
- 3) The owner or operator shall annually submit an updated list of insignificant activities that occurred during the preceding year, with the compliance certification due April 15th.
- 4) Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
- 5) The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions, or use Potential to Emit (PTE) as the annual emissions for each piece of equipment.
- 6) The District has determined that no monitoring, record keeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) unit.

Fee Comment

On May 15, 2013, the Board approved revisions to Regulation 2.08, which implemented a new fee structure. As a result, IMI South, LLC – Middletown facility will be required to pay the initial issuance fee as well as annual fees.

The initial issuance fee for a FEDOOP is \$2,542.40 in accordance with the Schedule of Fees table, Regulation 2.08, section 12.9.6. This fee shall be paid to the District prior to the issuance of the permit.

Attachment A – Dust Control Plan**FUGITIVE DUST CONTROL PLAN**

**Rogers Group, Inc.- Jefferson County Stone site
12613 Avoca Road
Louisville, Kentucky**

Introduction

This Fugitive Dust Control Plan has been prepared to comply with the requirements of Regulation 1.14 of the Louisville Metro Air Pollution Control District (APCD) for the Jefferson County Stone facility located at 12613 Avoca Road.

Administration of Plan

This is a comprehensive plan covering the Jefferson County Stone site. Four separate business entities operate on the site, with three of them sharing a quarter-mile entrance road. Responsibilities have been divided among the site managers of the Rogers Group, Inc. Jefferson County Stone mining and crushing operation, the Louisville Paving Company asphalt plant, and the Irving Materials, Inc. (IMI) concrete plant. The fourth business, Lee Brick and Block uses another unique entrance road 0.5 miles to the west on Old Henry Road and has not been included in this plan.

Description of Facility

The Jefferson County Stone site is a 118 acre property located at 12613 Avoca Road in Louisville, Kentucky. The site is bordered by Old Henry Road to the north which curves to also form the western border, Avoca Road to the south, and the Gene Snyder Freeway to the east. The site is utilized for underground limestone mining and crushed stone products, asphalt paving products, cementitious concrete products, and cement block manufacturing and sales.

Approximately 24 acres at the far west of the site, including the Lee Brick & Block plant and the inactive quarry no. 1, are not included in this plan.

The front of the site features inactive quarry no. 2 and inactive quarry no. 3, and a quarter-mile long paved entrance road leading to the Rogers Group, Inc.- Jefferson County Stone scalehouse. The site is heavily wooded through this area. South of the scalehouse, the road becomes a gravel road leading past the Louisville Paving asphalt plant down to the IMI Concrete plant. The gravel road also forks to the west, leading into the Jefferson County Stone maintenance shop, stockpiling, and crushing plant areas. These areas are gravel-covered as well.

Dust Control Measures

The following measures will be used to control dust at the Jefferson County Stone site:

1. Site Monitoring

The quarry superintendent and/or plant operators will be present whenever any of the three plants are in operation. These operators will assess the need for dust control on an hourly basis at all times that the facilities are open for business.

When needed, a water truck will be utilized to wet the plant areas to prevent fugitive dust emissions from forming. The water truck will not be used when the ambient air temperature falls below freezing and may be suspended when weather conditions contribute to the control of fugitive dust emissions (i.e. periods of rainfall) in these areas.

2. Traffic Maintenance

When all of the plants on the site are operating, there may be over 500 truck trips per day on the site. These trucks may be delivering raw materials for production or delivering finished products for shipment to customers.

The trucks delivering raw materials may be either self contained trucks or open haul trucks. The self contained trucks pump their contents into silos or tanks which are vented and do not generate fugitive dust. If the equipment is faulty or not in proper working condition, pumping of these materials will be suspended until the problem is corrected. The open haul trucks are used to deliver sand or aggregate either from the quarry stockpile area or from off site. These haul trucks use the watered access roads on site to prevent the generation of fugitive dust.

Trucks which are delivering finished products off the site are tarped and will use the paved entrance road which is controlled by the sprinkler system in order to leave the site.

All other passenger vehicles including employee vehicles are limited to using the designated employee parking lots on the site to prevent the generation of fugitive dust.

3. Pavement Management

A sprinkler system has been installed along the entrance road from the property entry to the scalehouse. This system is being upgraded to extend past the scalehouse and south to the concrete plant site. The sprinkler system is used during periods of dry weather and keeps the road moist along its entire length to prevent fugitive dust emissions from truck traffic. The sprinkler system will be disabled when the ambient air temperature falls below freezing. If the weather conditions contribute to the control of fugitive dust emissions (i.e. during periods of rainfall), the sprinkler operation may be suspended until it is determined that fugitive dust emissions control is again needed.

A water retention area consisting of a water-filled dip at the southern end of the entrance road near the scale house will be constructed. All traffic leaving the site will be routed through the dip, which will be designed to wet the vehicle wheels to loosen any material accumulated on them. Following the water retention area will be a set of rumble strips to shake off the loosened material onto the entrance road before the vehicle exits the site. At the northern end of the

entrance road, a 3-inch rise from the surface of the entrance road to that of Old Henry Road will be smoothed out by building an asphalt “ramp” to lessen the jolt on vehicles as they hit the bump up to Old Henry Road, which has caused material to fall onto Old Henry Road just outside the site boundary.

4. Crushing Plant and Stockpiling Area Maintenance

Fugitive dust is initially controlled throughout the limestone crushing plant by the underground-mined limestone's inherent moisture' content. Crushing and screening processes are located under partial covered structures, and dust suppression equipment is used at strategic areas to control fugitive dust.

Stockpiles and gravel storage areas are watered periodically as needed to prevent the migration of fugitive dust. The gravel layer in these areas is maintained to a depth of no less than four inches.

A spray bar system has been installed on the highly visible stacking conveyor above the large base stone stockpile at the crushing plant. This water spray system will be used to wet the stockpile on windy days when fugitive dust is likely to blow from the top of the stockpile across the site boundary towards the wooded area to the north. This spray system is subject to the restrictions of not being used when ambient temperatures are below freezing or when wet weather contributes to the control of fugitive dust emissions from the stockpile.

5. Speed Control Measures

All trucks entering and exiting the site are stopped for ticketing by the businesses in order to maintain an accurate count of inventory and sales. The speed limit for the site, including the paved entrance road, is 15 miles per hour. Jefferson County Stone has reached an agreement with the Louisville Police Department to allow the site to use a trailer-mounted, radar-equipped speed limit sign along the entrance road which can be programmed to take a photo of vehicles violating a posted speed limit. The sign will show an approaching vehicle's speed, turn red when that speed is greater than 15 mph, and take a photo of the vehicle if its speed is greater than 20 mph. The photos can then be downloaded and the offenders notified and banned from the site if necessary. This trailer-mounted sign may only be used by the site when it is available from the police department; therefore, it will not be possible to schedule a particular time or length of stay for the sign on the entrance road.

Attachment B - Protocol Checklist for a Performance Test

A completed protocol should include the following information:

- 1. Facility name, location, and ID #;
- 2. Responsible Official and environmental contact names;
- 3. Permit numbers that are requiring the test to be conducted;
- 4. Test methods to be used (i.e. EPA Method 1, 2, 3, 4, and 5);
- 5. Alternative test methods or description of modifications to the test methods to be used;
- 6. Purpose of the test including equipment and pollutant to be tested; the purpose may be described in the permit that requires the test to be conducted or may be to show compliance with a federal regulation or emission standard;
- 7. Tentative test dates (These may change but the District will need final notice at least 10 days in advance of the actual test dates in order to arrange for observation.);
- 8. Maximum rated production capacity of the system;
- 9. Production-rate goal planned during the performance test for demonstration of compliance (if appropriate, based on limits);
- 10. Method to be used for determining rate of production during the performance test;
- 11. Method to be used for determining rate of production during subsequent operations of the process equipment to demonstrate compliance;
- 12. Description of normal operation cycles;
- 13. Discussion of operating conditions that tend to cause worse case emissions; it is especially important to clarify this if worst case emissions do not come from the maximum production rate;
- 14. Process flow diagram;
- 15. The type and manufacturer of the control equipment, if any;
- 16. The control equipment (baghouse, scrubber, condenser, etc.) parameter to be monitored and recorded during the performance test. Note that this data will be used to ensure representative operation during subsequent operations. These parameters can include pressure drops, flow rates, pH, and temperature. The values achieved during the test may be required during subsequent operations to describe what pressure drops, etcetera, are indicative of good operating performance; and
- 17. How quality assurance and accuracy of the data will be maintained, including;
 - Sample identification and chain-of-custody procedures
 - If audit samples are required for this test method, audit sample provider and number of audit samples to be used
- 18. Pipe, duct, stack, or flue diameter to be tested;
- 19. Distances from the testing sample ports to the nearest upstream and downstream flow disturbances such as bends, valves, constrictions, expansions, and exit points for outlet and additionally for inlet;
- 20. Determine number of traverse points to be tested for outlet and additionally for inlet if required using Appendix A-1 to 40 CFR Part 60;
 - Method 1 if stack diameter is >12"
 - Method 1a if stack diameter is greater than or equal to 4" and less than 12"
 - Alternate method of determination for <4"
 - If a sample location at least two stack or duct diameters downstream and half a diameter upstream from any flow disturbance is not available then an alternative procedure is available for determining the acceptability of a measurement location. This procedure described in Method 1, Section 11.5 allows for the determination of gas flow angles at the sampling points and comparison of the measured results with acceptability criteria.
- 21. The Stack Test Review fee shall be submitted with each stack test protocol.