

**Louisville Metro Air Pollution Control District**  
**850 Barret Ave., Louisville, Kentucky 40204**  
**31 July 2015**

**Federally Enforceable District Origin Operating Permit**  
**Statement of Basis**

**Company:** IMI South, LLC – Outer Loop

**Plant Location:** 2001 Outer Loop, Louisville, Kentucky 40219

**Date Application Received:** 2 February 2006; 8 March 2015

**Date of Draft Permit:** 31 July 2015

**District Engineer:** Bob Wesely

**Permit No:** O-0628-15-F

**Plant ID:** 0628

**SIC Code:** 3273

**NAICS:** 327320

**Introduction:**

This permit will be issued pursuant to District Regulation 2.17- *Federally Enforceable District Origin Operating Permits*. Its purpose is to limit the plant wide potential emission rates from this source to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements.

Jefferson County is classified as an attainment area for lead (Pb), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), 1 hr and 8 hr ozone (O<sub>3</sub>), and particulate matter less than 10 microns (PM<sub>10</sub>); is a non-attainment area for the 1997 standard for particulate matter less than 2.5 microns (PM<sub>2.5</sub>) and is a unclassifiable area for the 2012 standard for particulate matter less than 2.5 microns (PM<sub>2.5</sub>) and partial non-attainment for sulfur dioxide (SO<sub>2</sub>).

**Application Type/Permit Activity:**

Initial Issuance

Permit Revision

Administrative

Minor

Significant

Permit Renewal

**Compliance Summary:**

Compliance certification signed

Compliance schedule included

Source is out of compliance

Source is operating in compliance

**I. Source Information**

1. **Product Description:** IMI South, LLC – Outer Loop is a central mix (wet) ready mix concrete production facility, consisting of one (1) central mix (wet) ready mix concrete batch plant utilizing conveyors, aggregate bins, weigh hoppers, cement silo and flyash silo.
2. **Process Description:** At the ready mix concrete plant, the dry components of ready mix concrete (cement, flyash, sand, and aggregate) are measured and loaded with water into a central mixer that mixes the concrete ingredients and discharges the wet mix concrete into ready mix concrete transit trucks that transport the concrete to offsite delivery locations.
3. **Site Determination:** There are no other facilities that are contiguous or adjacent to this facility
4. **Emission Unit Summary:**

Emission Unit	Equipment Description
U1	One (1) Erie-Strayer, model MG11-C, central mix (wet) ready mix concrete plant, utilizing a combination cement/flyash silo, two (2) outside aggregate/sand conveyors for loading overhead aggregate/sand bins, and a C & W Dust System, model RA-280, baghouse central dust collection system.

5. **Fugitive Sources:** The fugitive sources identified by the source are uncontrolled portions of the ready mix concrete unit.
6. **Permit Revisions:**

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
Initial	0182-01-F	11/5/2001	6/17/2001	Initial	Entire Permit	Initial FEDOOP Permit Issuance
N/A	O-0628-15-F	x/__/2015	7/31/2015	Renewal	Entire Permit	Renewal Permit Issuance and incorporation of construction permits 313-03-C & 314-03-C

**7. Construction Permit History:**

Permit No.	Issue Date	Description
313-03-C	10/31/2004	One (1) Erie Strayer MG11-C portable/mobile central mix concrete batch plant, including one (1) cement silo
314-03-C	10/31/2004	Two (2) baghouses, Griffin Environmental, model 36KS for controlling emissions during loading of cement silo

**8. Emission Summary:**

Pollutant	District Calculated Actual Emissions (tn/yr) 2011 Data	Pollutant that triggered Major Source Status (based on PTE)
CO	0	No
NO <sub>x</sub>	0.02	No
SO <sub>2</sub>	0	No
PM	0.36	No
PM <sub>10</sub>	0.16	Yes
VOC	0.000	No
Total HAPs	0	No
Single HAP	0	No

**9. Applicable Requirements:**

PSD       40 CFR 60       SIP       40 CFR 63  
 NSR       40 CFR 61       District-Origin       Other

**10. MACT Requirements:** The source has no future MACT requirements.

**11. Referenced Federal Regulations in Permit:** There are no federal regulations for ready mix concrete batch plants.

**II. Regulatory Analysis**

**1. Acid Rain Requirements:** IMI South, LLC-Outer Loop is not subject to the Acid Rain Program.

2. **Stratospheric Ozone Protection Requirements:** Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. IMI South, LLC-Outer Loop does not manufacture, sell, or distribute any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.
3. **Prevention of Accidental Releases 112(r):** IMI South, LLC-Outer Loop does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount.
4. **40 CFR Part 64 Applicability Determination:** IMI South, LLC-Outer Loop is not subject to 40 CFR Part 64 - *Compliance Assurance Monitoring for Major Stationary Sources*.
5. **Basis of Regulation Applicability**

- a. **Plant-wide**

IMI South, LLC-Outer Loop is a potential major source for the pollutant PM<sub>10</sub>. Regulation 2.17 – *Federally Enforceable District Origin Operating Permits* establishes requirements to limit the plant wide potential emission rates to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements. The source requested limits of the criteria pollutant PM<sub>10</sub> < 25 tn/yr to be a FEDOOP STAR Exempt source as defined by Regulation 5.00, section 1.13.5. The source is not major for Greenhouse Gases.

Regulations 5.00 5.20, 5.21, and 5.23 (STAR Program) establishes requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards. IMI South, LLC-Outer Loop took the total plant wide limit of 25 tpy for criteria pollutants to be a FEDOOP STAR Exempt source

Regulation 2.17, section 5.2, requires monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. The owner or operator shall maintain all the required records for a minimum of 5 years and make the records readily available to the district upon request.

Regulation 2.17, section 7.2, requires stationary sources for which a FEDOOP is issued shall submit an Annual Compliance Certification by April 15, of the following calendar year. In addition, as required by

Regulation 2.17, section 5.2, the source shall submit an Annual Compliance Report to show compliance with the permit, by March 1 of the following calendar year. Compliance reports and compliance certifications shall be signed by a responsible official and shall include a certification statement per Regulation 2.17, section 3.5.

- b. **Emission Unit U1** – Central (wet) mix ready mix concrete batch plant, utilizing combination cement/flyash silo, aggregate bins, sand bins, weight hoppers, conveyors, and drum mixer.

- i. **Equipment:**

P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
E1: Aggregate conveyor loading hoppers	329 tn/hr	1/1/04	2.17	Regulation 2.17 applies to a source taking a limit to be minor.
E2: Sand conveyor loading hopper	256 tn/hr	1/1/04		
E3: Aggregate bin loading conveyor	329 tn/hr	1/1/04		
E4: Sand bin loading conveyor	256 tn/hr	1/1/04		
E5: Cement silo #1	71 tn	1/1/04		
E6: Flyash silo #2	36 tn	1/1/04		
E7: Agg/sand weigh batcher	602 tn/hr	1/1/04	7.08	Regulation 7.08 establishes the requirements for PM emissions from new processes that commence construction after September 1, 1976.
E8: Cement/flyash weigh batcher	103 tn/hr	1/1/04		
E9: Aggregate/sand transfer conveyor	602 tn/hr	1/1/04		
E10: Central mixer loading	736 tn/hr	1/1/04		
C1: C&W Dust Systems, model RA-280, baghouse central dust collection system	13,000 cfm	10/1/04		

- ii. **Standards/Operating Limits**

- 1) **PM/PM<sub>10</sub>**

- (a) Regulation 2.17, section 5.1, allows the source to set a synthetic limit below the major source threshold. Source requested a combined total plant-wide

synthetic limit of less than twenty-five (25) tons in a 12 consecutive month period, for the pollutant PM<sub>10</sub>.

- (b) Construction permit 313-03-C for the ready mix batch plant limits the emissions of the pollutant PM from each batch plant emission point to 49.7 lb/hr.
- (c) Construction permit 313-03-C for the ready mix batch plant limits the emissions of the pollutant PM from the batch plant to 13.59 tons per year.
- (d) The PM emissions for cement silo filling, emission point E5, and central mixer loading, emission point E10, each exceed the PM lb/hr standard uncontrolled. The source is required to operate the dust collection system at all times the emission points are in operation, in order to show compliance with Construction Permit 313-03-C, 49.7 lb/hr PM standard.

2) **Opacity**

- (a) Regulation 7.08, section 3.1.1 establishes an opacity standard of less than 20%, for processes that commenced construction after September 1, 1976.

**III. Other Requirements**

- 1. **Temporary Sources:** The source did not request to operate any temporary facilities.
- 2. **Short Term Activities:** The source did not report any short term activities.
- 3. **Emissions Trading:** N/A
- 4. **Operational Flexibility:** The source did not request any operation flexibility.
- 5. **Compliance History:**

Incid. #	Date	Regulation Violated	Settlement
NA		None	No fines

**6. Calculation Methodology or Other Approved Method:**

Concrete Batch Plants (U1): Emission factors from AP-42, Chapter 11.12, Concrete Batching, were used to determine Potential To Emit and confirm limits requested by the source.

**7. Insignificant Activities:**

The source did not list any insignificant activities.