



Louisville Metro Air Pollution Control District  
 701 West Ormsby Avenue, Suite 303  
 Louisville, Kentucky 40203-3137



**12 October 2016**

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

**Owner/Source:** Riverside Paving and Contracting, Inc.  
**Plant Location:** 263 Eiler Avenue, Louisville, Kentucky 40214  
**Date Application Received:** 23 August 2006  
 29 August 2006  
 28 August 2014  
 28 October 2015  
 29 July 2016

**Public Comment Date:** 09/08/2016; 10/12/2016

**District Engineer:** Elise Venard **Permit No:** O-0150-16-F  
**Plant ID:** 0150 **SIC Code:** 2951 **NAICS:** 324121

**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>); and is a non-attainment area for the 1997 standard for particulate matter less than 2.5 microns (PM<sub>2.5</sub>), unclassifiable for the 2012 standard for particulate matter less than 2.5 microns (PM<sub>2.5</sub>) and partial non-attainment area 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:** Riverside Paving and Contracting, Inc. is a hot mix asphalt production facility, consisting of stockpiles of virgin and recycled aggregates, liquid storage tanks, and a batch mix HMA plant.
2. **Process Description:** Raw materials are delivered to and stored onsite awaiting production. The raw materials are then pre-processed to assure proper sizing and content for the end product. After pre-processing the aggregate and liquid from the storage tanks are mixed together in the batch mixer to produce hot mix asphalt. The HMA is then temporarily stored when waiting for transit trucks and it is transported 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
Plant-wide	Plant-wide requirements
U1	Aggregate Stockyard
U2	Aggregate and RAP Processing
U3	HMA Production
IA-1	Storage Tanks
IA-2	Parts Washer

5. **Fugitive Sources:** The fugitive sources identified by the source are uncontrolled portions of the RAP and HMA processing units.
6. **Permit Revisions:**

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
Initial	0208-01-F	12/1/2001	07/08/2001	Initial	Entire Permit	Initial Permit Issuance
NA	O-0150-16-F	xx/xx/201x	09/08/2016	Renewal	Entire Permit	Permit renewal; Incorporation of construction permit 7-06-C, 8-06-C, Administrative change in Responsible Official, STAR-exempt application, and Insignificant Activities list.

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
			10/12/2016	Significant	General Condition #10	Removed Green House Gas limits

**7. Construction Permit History:**

Permit No.	Issue Date	Description
7-06-C	3/31/2006	Modification of existing HMA plant
8-06-C	3/31/2006	Installation of H&B baghouse

**8. Emission Summary:**

Pollutant	District Calculated Actual Emissions (tn/yr) 2014 Data	Pollutant that triggered Major Source Status (based on PTE)
CO	17.63	Yes
NO <sub>x</sub>	3.03	Yes
SO <sub>2</sub>	0.2	No
PM <sub>10</sub>	1.11	Yes
VOC	0.33	No
<b>Total HAPs</b>	0.3	No

**9. Applicable Requirements:**

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

**10. Referenced MACT Federal Regulations:** The source has no MACT requirements.

**11. Referenced non-MACT Federal Regulations:** Federal regulations 40 CFR Part 60, Subpart I “Standards of Performance for Hot Mix Asphalt Plants” apply to this asphalt production facility.

**II. Regulatory Analysis**

1. **Acid Rain Requirements:** Riverside Paving and Contracting, Inc. 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. Riverside Paving and Contracting, Inc. 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):** Riverside Paving and Contracting, Inc. 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:** Riverside Paving and Contracting, Inc. is not subject to 40 CFR Part 64 - *Compliance Assurance Monitoring for Major Stationary Sources*.
5. **Basis of Regulation Applicability**

- a. **Plant-wide**

Riverside Paving and Contracting, Inc. is a potential major source for the pollutants CO, NO<sub>x</sub>, and 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 pollutants PM<sub>10</sub> < 25 ton/yr, CO < 25 ton/yr, and NO<sub>x</sub> < 25 ton/yr, to be a FEDOOP STAR Exempt source as defined by Regulation 5.00, section 1.13.5.

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. Riverside Pacing and Contracting, Inc. took the total plant-wide limits 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 to 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 – Aggregate Stockyard**

**i. Equipment:**

P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
E1: Limestone sand and aggregate stockpiles	21170 ft <sup>3</sup>	1970	6.09	Regulation 6.09 establishes the requirements for PM emissions from new processes that commence construction before September 1, 1976.
E2: Recycled Asphalt Product (RAP) aggregate stockpiles	21170 ft <sup>3</sup>			
E3: Haul roads, unpaved	160 ft		1.14	Regulation 1.14 provides for the control of fugitive particulate emissions for any source.

**ii. Standards/Operating Limits**

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

- (a) The emission standard for PM at each emission point with a process throughput greater than 30 tn/hr is determined in accordance with Regulation 6.09, section 3.6.2 as follows:  
 $PM \text{ lb/hr limit} = 55.0 (\text{process weight tn/hr})^{0.11} - 40.$
- (b) The District has determined that the stockpiles under standard conditions and stated production limits cannot exceed Regulation 6.09 PM lb/hr limits uncontrolled.
- (c) Regulation 1.14, section 2.1 establishes work practice standards to prevent particulate matter from becoming airborne beyond the work site.

2) **Opacity**

- (a) Regulation 6.09, section 3.3.1 establishes an opacity standard of less than 20%, for processes that commenced construction before September 1, 1976.
- (b) Regulation 1.14, section 2.3 establishes standards for opacity.

c. **Emission Unit U2 – Aggregate and RAP Processing**

i. **Equipment:**

P/PE	Capacity (tph)	Install Date	Applicable Regulation	Basis for Applicability
E-4: (4) Virgin aggregate cold-feed bins, 10'x12', with 5-hp D.C. drives	40 each	1989		
E-5: (1) RAP feed bin	40	1996	7.08	Regulation 7.08 establishes the requirements for PM emissions from new processes that commence construction after September 1, 1976.
E-6: (1) Maxi-grind wood stump grinder used for initial RAP sizing	50			
E-7: (1) RAP shaker screen, 3/4" screen	200			
E-8a: (1) H&B variable speed belt, 24"x7' traveling under the bins	350			
E-8b: (1) Conveyor belt to RAP shaker screen (1) Conveyor belt from screen to RAP grinder (1) H&B conveyor from grinder to shaker	50 each			
E-8c: (1) H&B gathering conveyor 30" (1) H&B open 40' long inclined conveyor from shaker to Hot Bucket elevator (1) H&B inclined conveyor to the dryer, 30"x70'	200 each			
E-9: (1) H&B hot bucket elevator to mixing tower. Double chain	200			

ii. **Standards/Operating Limits**

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

(a) The emission standard for PM at each emission point with a process throughput greater than 30 tn/hr is determined in accordance with Regulation 7.08, section 3.1.2 as follows:

$$\text{PM lb/hr limit} = 17.31 (\text{process weight tn/hr})^{0.16}.$$

(b) The District has determined that the aggregate processing emission points E-4, E-5, E-6, E-8, and E-9, under standard conditions, cannot exceed Regulation 7.08 PM lb/hr limits uncontrolled.

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.

d. **Emission Unit U3 – HMA production**

i. **Equipment:**

P/PE	Capacity (tph)	Install Date	Applicable Regulation	Basis for Applicability
E-10: H&B batch-type asphalt mixing tower (pug mill), with H&B aggregate dryer, Hauck burner, and Gencore hot transfer oil heater. Natural gas with No. 2 fuel oil backup.	200	2006	7.09, 7.11, 40 CFR Part 60 Subpart I	Regulation 7.08 establishes the requirements for PM emissions from new processes that commence construction after September 1, 1976.
E-11a: Drag-slat conveyor, single chain, 30"x88', with 75-hp motor	400		7.08	Regulation 7.09 establishes the Standard of Performance for New Process Gas Streams for processes that commence construction after April 19, 1972.
E-11b: H&B drag-chain conveyor	200			
E-12: H&B silo	250			
E-13: Bituma-stor silo, with oil heated cone, with new style 21/2 ton batcher	230			
				Regulation 40 CFR 60 Subpart I establishes the Standards of Performance Hot Mix Asphalt

P/PE	Capacity (tph)	Install Date	Applicable Regulation	Basis for Applicability
				Facilities for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973.

ii. **Standards/Operating Limits**

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

- (a) The emission standard for PM at each emission point with a process throughput greater than 30 tn/hr is determined in accordance with Regulation 7.08, section 3.1.2 as follows:  
 $PM \text{ lb/hr limit} = 17.31 (\text{process weight tn/hr})^{0.16}$ .
- (b) The listed equipment (E-1, E-2, E-3) cannot individually exceed the stated Regulation 7.08 PM lb/hr standard. Emission point E-10, Batch Mixer, needs to be controlled at all times to meet the Regulation 7.08 PM lb/hr standard.
- (c) In order for the rotary dryer to meet the standards in Regulation 7.08, section 3.1.2, the owner or operator shall operate and maintain the associated control device at all times the equipment is in operation, including periods of startup, shutdown, and malfunction.
- (d) Regulation 7.11, section 3.1.1 sets the particulate matter standard for performance for asphalt paving operations operating on and after April 1980 and applies to the Batch mixer (E-10).
- (e) Federal Regulation 40 CFR Part 60, Subpart I establishes the particulate matter standard for HMA facilities and applies to the Batch mixer (E-10).

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.
- (b) Regulation 7.11, section 3.1.2 sets the opacity standard for performance for asphalt paving

operations operating on and after April 1980.

- (c) Federal Regulation 40 CFR Part 60, Subpart I establishes the particulate matter standard for HMA facilities and applies to the Batch mixer (E-10).

3) **VOC**

- (a) Regulation 7.11, section 4 sets the cutback asphalts use restrictions for asphalt paving operations operating on and after April 1980.

4) **CO**

- (a) Regulation 7.09, section 5.1 sets the carbon monoxide emission standard for processes using gas streams built on or after April 1972.
- (b) The CO emissions from the process are created by the combustion of fuel oil or natural gas to generate heat required for removing moisture from aggregate and heating the aggregate for the production of hot mix asphalt. The nominal flame temperature of greater than 2,000 °F exceeds the 1,300 °F temperature requirement of Regulation 7.09, Section 5.1.

5) **SO<sub>2</sub>**

- (a) Regulation 7.09, section 4 establishes a sulfur dioxide standard of less than 29.63 grains per 100 dscf for processes that commenced construction after September 1, 1976.
- (b) The production limit reduces the emissions of criteria pollutant SO<sub>2</sub> to less than forty (40) tons during any twelve (12) consecutive month period for Regulation 7.09 SO<sub>2</sub> emission standard compliance.

6) **Unit Operation**

- (a) The District has stipulated a limited HMA production standard of one hundred eighty thousand tons (125,000 tn) during any twelve (12) month consecutive period in order to control criteria pollutant emissions for Regulation 2.17 emission

standard compliance.

iii. **Monitoring and Recordkeeping**

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

- (a) Federal Regulation 40 CFR Part 60, Subpart I establishes the monitoring and recordkeeping requirements for HMA facilities.
- (b) A Method 5 stack test was performed on April 24, 2008. The Method 5 test showed that the baghouse was operating within the limit of 0.040 grains/dscf and had an average emission rate of 0.0123 grains PM/dscf (3.2 lb PM/hr). During the test the average baghouse flowrate was 2,577,774 cf/hr. The limiting capacity of the Batch mixer (E-10) is 200 tph, therefore, the emission rate of 3.24 lb/hr / 200 ton/hr, can be expressed as 0.0162 lb/ton of HMA produced. The test demonstrated that controlled the equipment met the PM emission standards in Regulation 7.08 and Federal Regulation 40 CFR Part 60 Subpart I.

2) **Opacity**

- (a) Federal Regulation 40 CFR Part 60, Subpart I establishes the monitoring and recordkeeping requirements for HMA facilities.

iv. **Reporting**

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

- (a) Federal Regulation 40 CFR Part 60, Subpart I establishes the reporting requirements for HMA facilities.

2) **Opacity**

- (a) Federal Regulation 40 CFR Part 60, Subpart I establishes the reporting requirements for HMA facilities.

**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:**

<b>Incid. #</b>	<b>Date</b>	<b>Regulation Violated</b>	<b>Settlement</b>
00791	4/12/1994	Reg. 1.11 – Open burning	8/11/1994 Agreement with fine \$300
01058	4/1/0995	Reg. 2.03 – No permit	6/5/1995 Agreement with fine \$600
01363	6/28/1996	Reg. 2.03 – No permit	8/23/1996 Agreement with fine \$300
02994	6/10/2002	Reg. 2.17	8/30/2003 Agreement with fine \$500
03152	7/12/2002	Reg. 1.09	8/30/2003 Agreement with fine \$200
03023	7/19/2002	Reg. 2.17	8/30/2003 Agreement with fine \$1300
06193	10/28/2011	Reg. 2.17, sect. 01 & 03	3/20/2013 Agreement with fine \$1500
ADM. Cit. A-7004	8/31/2012	Reg. 2.17	3/4/2013 Agreement with fine \$550

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

a. **PM/PM10**

- i. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall calculate PM<sub>10</sub> emissions based on HMA production and the emission factors stated in the table below unless another method is approved in writing by the District.

Emission Source	Uncontrolled PM <sub>10</sub> (lb/ton)	Controlled PM <sub>10</sub> (lb/ton)	Emission Factor Sources
Aggregate Storage Pile	0.0639 *	0.0319 †	AP-42 Chapter 13.2.1 AP-42 Chapter 13.2.2 AP-42 Chapter 13.2.4 EPA-450/3-88-008
Tertiary Crushing	0.0024	0.00054	AP-42 Chapter 11.19.2-2
Screening	0.0087	0.00074	AP-42 Chapter 11.19.2-2
Collecting conveyor	0.0011	0.000046	AP-42 Chapter 11.19.2-2
Aggregate transfer	0.0033	0.0017 †	AP-42 Chapter 11.12-2
Sand transfer	0.00099	0.000495 †	AP-42 Chapter 11.12-2
Batch Mixer	4.5	0.0098	AP-42 Chapter 11.1-1
Silo filling <sup>o</sup>	0.000585 1	0.000585	AP-42 Chapter 11.1-14
Plant load-out	0.000521	0.000521	AP-42 Chapter 11.1-14

\* This emission factor includes loading, unloading, transport, and wind action on a sitting storage pile.

† Controlled emission factor assumes 50% efficiency from water suppression and carryover.

<sup>o</sup> "Silo filling" includes emissions from drag-slat conveyors and storage silos

- ii. Using the above Emission Factor calculating the tons of PM<sub>10</sub> emitted, for both controlled and uncontrolled conditions, is as follows:

$$E_{PM10} = (X)(EF \text{ lb/ton})(1 \text{ ton}/2000 \text{ lb.})$$

Where: E<sub>PM10</sub> = controlled or uncontrolled PM<sub>10</sub> emissions (tons)

X = the amount of HMA produced (tons)

- iii. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall account for the insignificant activity PM<sub>10</sub> emissions when totaling the plant-wide emissions. Since the emissions are minor the owner or operator may use the potential PM<sub>10</sub> emissions as the emissions produced during the 12 consecutive month period. District approved PTE is as follows:

- Aggregate cold-feed bins (E-4) = 0.0043 lb. PM<sub>10</sub>/ton HMA
- RAP feed bin (E-5) = 0.0033 lb. PM<sub>10</sub>/ton HMA
- RAP grinder/crusher (E-6) = 0.0024 lb. PM<sub>10</sub>/ton HMA
- Short conveyors (E-8b) = 0.0011 lb. PM<sub>10</sub>/ton HMA
- Long conveyors (E-8c) = 0.0011 lb. PM<sub>10</sub>/ton HMA
- Bucket elevator (E-9) = 0.0033 lb. PM<sub>10</sub>/ton HMA
- Drag-slat conveyor (E-11a) = 0.00059 lb. PM<sub>10</sub>/ton HMA
- Drag-chain conveyor (E-11b) = 0.00059 lb. PM<sub>10</sub>/ton HMA
- Silos (E-12) = 0.00059 lb. PM<sub>10</sub>/ton HMA

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1 District calculated emission factors for PM<sub>10</sub>, CO and VOC for Silo filling and Plant load-out were derived from AP-42, Chapter 11.1, Table 11.1.14 formulas using a default temperature of 325°F for the asphalt temperature "T" and the asphalt volatility "V" value of (-0.5).

- Plant loadout (E-13) = 0.00052 lb. PM<sub>10</sub>/ton HMA

iv. The owner or operator shall calculate the PM emissions from HMA batch mixer (E-10) based on product throughput during the control device bypass and the emission factors stated in the Table below unless another method is approved in writing by the District.

Emission Source	Uncontrolled PM (lb/ton)	Controlled PM (lb/ton)	Emission Factor Sources
Batch Mixer/Dryer	32	0.042	AP-42 Chapter 11.1-1

v. A calculated estimation of the uncontrolled PMPM<sub>10</sub> emissions during the bypass event using the uncontrolled emission factor in the table above.

$$E_{PM} = (X)(EF \text{ lb/ton})$$

Where: E<sub>PM</sub> = uncontrolled PM emissions (lbs) during a bypass event

X = the amount of HMA (tons) produced during a bypass event

vi. Subsequent compliance with the stack emissions limit can be demonstrated by calculating PM emissions using an emission factor derived from a valid stack test and the product throughput.

$$E_{PM} = (X)(EF)(BC)(7000 \text{ grains/1 lb})(1 \text{ month}/720 \text{ hrs})$$

Where: E<sub>PM</sub> = controlled or uncontrolled PM stack emissions (grains/cf)

X = the amount of material HMA (Tons) produced during the month

EF = 0.0162 lb/ton HMA produced (controlled)

EF = 0.81 lb/ton HMA produced (uncontrolled)

BC = 1 hr/3,000,000 cf baghouse capacity

**b. CO**

i. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall calculate the CO emissions based on HMA production and the emission factors stated in the table below unless another method is approved in writing by the District.

Emission Source	CO (lb/ton)	Emission Factor Sources
Batch mixer	0.4	AP-42 Chapter 11.1-5
Silo filling*	0.00118	AP-42 Chapter 11.1-14
Plant load-out	0.00134	AP-42 Chapter 11.1-14

\* "Silo filling" includes emissions from drag-slat conveyors and storage silos

- ii. Using the above Emission Factors calculating the tons of CO emitted is as follows:

$$E_{CO} = (X)(EF \text{ lb/ton})(1 \text{ ton}/2000 \text{ lb.})$$

Where:  $E_{CO}$  = CO emissions (tons)

X = the amount of HMA produced (tons)

- iii. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall account for the insignificant activity CO emissions when totaling the plant-wide emissions. Since the emissions are minor the owner or operator may use the potential CO emissions as the 12 consecutive month period emissions. District approved PTE is as follows:

- Drag-slat conveyor (E-11a) = 0.0012 lb. CO/ton HMA
- Drag-chain conveyor (E-11b) = 0.0012 lb. CO/ton HMA
- Silos (E-12) = 0.0012 lb. CO/ton HMA
- Plant loadout (E-13) = 0.0013 lb. CO/ton HMA

c. **NO<sub>x</sub>**

- i. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall calculate NO<sub>x</sub> emissions based on HMA production and the emission factors stated in the table below unless another method is approved in writing by the District.

Emission Source	NO <sub>x</sub> (lb/ton)	Emission Factor Sources
Batch mixer burning No. 2 fuel oil	0.12	AP-42 Chapter 11.1-5
Batch mixer burning natural gas	0.025	AP-42 Chapter 11.1-5

- ii. Using the above Emission Factors calculating the tons of NO<sub>x</sub> emitted is as follows:

$$E_{NOX} = (X)(EF \text{ lb/ton})(1 \text{ ton}/2000 \text{ lb.})$$

Where:  $E_{NOX}$  = NO<sub>x</sub> emissions (tons)

X = the amount of HMA produced (tons)

d. **SO<sub>2</sub>**

- i. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall calculate the SO<sub>2</sub> emissions based on HMA production and the emission factors stated in the table below unless another method is approved in writing by the District.

Emission Source	SO <sub>2</sub> (lb/ton)	Emission Factor Sources
Batch mixer burning No. 2 fuel oil	0.088	AP-42 Chapter 11.1-5
Batch mixer burning natural gas	0.0046	AP-42 Chapter 11.1-5

- ii. Using the above Emission Factors calculating the tons of SO<sub>2</sub> emitted is as follows:

$$E_{SO_2} = (X)(EF \text{ lb/ton})(1 \text{ ton}/2000 \text{ lb.})$$

Where:  $E_{SO_2}$  = SO<sub>2</sub> emissions (tons)  
 X = the amount of HMA produced (tons)

e. **VOC**

- i. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall calculate the VOC emissions based on HMA production and the emission factors stated in the table below unless another method is approved in writing by the District.

Emission Source	VOC (lb/ton)	Emission Factor Sources
Asphalt Storage Tank, 20000 gallon	7.89E-5 lb/ton	TANKS 4.09d
Diesel Fuel Storage Tank, 10000 gallon	2.71E-6 lb/ton	TANKS 4.09d
Batch mixer	0.0082 lb/ton	AP-42 Chapter 11.1-6
Silo filling*	0.012 lb/ton	AP-42 Chapter 11.1-14
Plant load-out	0.0041 lb/ton	AP-42 Chapter 11.1-14

\* "Silo filling" includes emissions from drag-slat conveyors and storage silos

- ii. Using the above Emission Factors calculating the tons of VOC is as follows:

$$E_{VOC} = (X)(EF \text{ lb/ton})(1 \text{ ton}/2000 \text{ lb.})$$

Where:  $E_{VOC}$  = VOC emissions (tons)  
 X = the amount of HMA produced (tons)

- iii. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall account for the insignificant activity VOC emissions when totaling the plant-wide emissions. Since the emissions are minor the owner or operator may use the potential VOC emissions as the 12 consecutive month period emissions. District approved PTE is as follows:

- Asphalt Storage Tank, 20000 gallon (T-1) = 1.99E-13 lb VOC/ton HMA

- Diesel Fuel Storage Tank, 10000 gallon (T-2) = 1.54E-12 lb VOC/ton HMA
- Drag-slat conveyor (E-11a) = 0.012 lb. VOC/ton HMA
- Drag-chain conveyor (E-11b) = 0.012 lb. VOC/ton HMA
- Silos (E-12) = 0.012 lb. VOC/ton HMA
- Plant loadout (E-13) = 0.0041 lb. VOC/ton HMA

## 7. Insignificant Activities

Emission Process	Equipment Description	Quantity	PTE (tpy) each	Regulation Basis
Aggregate bins	Limestone and RAP aggregate cold-feed bins, 40 tph each	5	PM <sub>10</sub> = 1.33	Regulation 1.02
Aggregate grinder	Maxigrind grinder, 50 tph	1	PM <sub>10</sub> = 0.53	Regulation 1.02
Short conveyors	Conveyor belts, 50 tph each	3	PM <sub>10</sub> = 0.24	Regulation 1.02
Inclined conveyors	Conveyor belts, 200 tph each	3	PM <sub>10</sub> = 0.96	Regulation 1.02
Hot elevator	Hot bucket elevator to mixer, 200 tph	1	PM <sub>10</sub> = 2.89	Regulation 1.02
Loadout station	HMA loadout station, 230 tph	1	VOC = 4.17	Regulation 1.02
Liquid storage tank	Asphaltic cement storage tank, 20000 gallon	1	VOC = 0.069	Regulation 1.02
Liquid storage tank	Tank for transfer hot oil, 10000 gallon. See IA Unit IA-1 for 10,000 and 20,000 tanks	1	VOC = 0.02	Regulation 1.02
Cold metal parts washer	Cold metal parts washer with secondary reservoir, 50 gallon. See IA Unit IA-2 for parts washer	1	VOC = 0.03	Regulation 1.02

- 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 15<sup>th</sup>.
- 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.

a. **IA-1 Equipment -- Storage Tanks**

i. **Equipment:**

P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
E-14: Gencore model Hy-way liquid asphalt coiled tank, with supply pump/loading pump	20000 gallon	1989	7.12	Regulation 7.12 establishes the requirements for storage tanks with a capacity greater than 250 gallons constructed after April 19, 1972
E-15: Diesel Fuel Tank for Gencor transfer hot oil transfer machine	10000 gallon	1989		

ii. **Standards/Operating Limits**

1) **VOC**

- (a) Regulation 7.12, section 3.3 requires submerged fill if the materials have an as stored vapor pressure of 1.5 psia or greater.
- (b) The tanks are not subject 40 CFR 60, Subpart Kb because the vapor pressure is less than the required 1.5 kPa.

b. **IA-2 Equipment – Parts Washer**

i. **Equipment**

Equipment	Capacity	Install Date	Applicable Regulation	Basis for Applicability
E-16: Cold solvent washer for metal parts cleaning, pump with cleaning brush, no conveyor, with secondary reservoir	50 gallon	1998	6.18	Regulation 6.18 establishes the requirements for solvent metal cleaning equipment.

i. **Standards/Operating Limits**

1) **VOC**

- (a) Regulation 6.18 provides for the control of emissions from solvent metal cleaning equipment.