



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



Federally Enforceable District Origin Operating Permit (FEDOOP)

Permit No.: O-0150-16-F

Plant ID: 0150

Effective Date: xx/xx/201x

Expiration Date: xx/xx/201x

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:

Owner/Source: Riverside Paving and Contracting, Inc.
 263 Eiler Avenue
 Louisville, Kentucky 40214

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:	PM ₁₀	CO	NO _x
Tons/year:	< 25	< 25	< 25

Application No.:	8942	Application Received:	08/23/2006
	73984		08/29/2006
	66732		08/28/2014
	74076		10/28/2015
	78640		07/29/2016

Permit Writer: Elise Venard

Date of Public Notice: 09/08/2016; 10/12/2016

{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	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, STAR-exempt limits, and Insignificant Activities list.
			10/12/2016	Significant	General Condition #10	Remove Green House Gas limits

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

Abbreviations and Acronyms

AP-42	- AP-42, <i>Compilation of Air Pollutant Emission Factors</i> , published by U.S.EPA
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. 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 following per Regulation 2.17, section 3.5.
 - A certification 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

Regulation	Title
1.11	Control of Open Burning
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
701 W. Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137***

Emission Unit: Plant-Wide

Plant-wide Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.14	Control of Fugitive Particulate Emissions	2.4
2.17	Federally Enforceable District Origin Operating Permits	1 through 9

Plant-wide Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. PM₁₀

- i. The owner or operator shall not allow the plant-wide emissions of the pollutant PM₁₀ to equal or exceed 25 tons during any consecutive twelve month period.¹ (Regulation 2.17, section 5.1)
- ii. No owner or operator shall cause or permit the discharge of visible fugitive emissions beyond the lot line of the property on which the emissions originate. (Regulation 1.14, section 2.4)
- iii. The owner or operator shall operate and maintain the water suppression system at all locations in the facility as necessary to comply with the PM₁₀ emission standard specified in this permit. (Regulation 2.17, section 5.1)
 - 1) The owner or operator shall perform a weekly visual inspection of the structural and mechanical integrity of the water suppression system for signs of damage, leakage, corrosion, or other equipment defects and repair as needed

b. CO

The owner or operator shall not allow the plant-wide emissions of the pollutant CO to equal or exceed 25 tons during any twelve consecutive month period. (Regulation 2.17, section 5.1)

¹ District PTE (Potential To Emit) calculations for this facility categorize this site as potentially uncontrolled major source for PM₁₀, CO, and NO_x. Riverside Paving and Contracting, Inc. is currently permitted to operate as a Synthetic Minor Source (FEDOOP) with STAR-exempt limits.

c. **NO_x**

The owner or operator shall not allow the plant-wide emissions of the pollutant NO_x to equal or exceed 25 tons during any twelve consecutive month period. (Regulation 2.17, section 5.1)

d. **SO₂**

i. The owner or operator shall not allow the plant-wide emissions of the pollutant SO₂ to equal or exceed 25 tons during any twelve consecutive month period. (Regulation 2.17, section 5.1)

ii. The owner or operator shall limit the sulfur content of the No. 2 fuel oil to less than 0.5% by weight. For each delivery of No. 2 fuel oil, a laboratory analysis for supplier certification shall be used to verify the fuel oil sulfur content. (Construction Permit 7-06-C, effective date 3/31/2006)

e. **VOC**

The owner or operator shall not allow the plant-wide emissions of the pollutant VOC to equal or exceed 25 tons during any twelve consecutive month period. (Regulation 2.17, section 5.1)

f. **Unit Operation**

i. The owner or operator shall not allow the total production of hot mix asphalt to exceed the synthetic limit of 125,000 tons during any twelve month consecutive period.² (Regulation 2.17, section 5.1)

ii. The owner or operator shall limit the usage of No. 2 fuel oil to 630,000 gallons during any consecutive twelve month period. (Construction Permit 7-06-C, effective date 3/31/2006)

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

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

a. **PM₁₀**

i. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall comply with the following requirements or record a negative declaration for the reporting period:

² The synthetic production limit of 125,000 ton HMA/year reduces the controlled emissions of CO, NO_x, SO₂, and VOC criteria pollutant to less than 25 tons during any twelve consecutive month period. The emissions of the criteria pollutant PM₁₀ do not exceed the 25 tons per year limit when the source does not exceed the synthetic limit of 125,000 tpy of hot mix asphalt, while using the cyclone collector and baghouse, per the district approved PTE of 08/02/2016.

- 1) The owner or operator shall maintain records, including calculations, which show the plant-wide total PM₁₀ emissions based on the HMA produced during the consecutive 12 month period.
- 2) The owner or operator shall calculate PM₁₀ 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 ₁₀ (lb/ton)	Controlled PM ₁₀ (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°	0.000585 ³	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.

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

- 3) Using the above Emission Factors calculate the tons of PM₁₀ emitted plant-wide, for both controlled and uncontrolled conditions, as follows:

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

Where: E_{PM10} = controlled or uncontrolled PM₁₀ emissions (tons) emitted plant-wide

X = the amount of HMA produced (tons)

- 4) The owner or operator shall account for the insignificant activity PM₁₀ emissions when totaling the plant-wide emissions. Since the emissions are minor the owner or operator may use the potential PM₁₀ emissions based on the HMA produced during the consecutive 12 month period. District approved PTE is as follows:

- Aggregate cold-feed bins (E-4) = 0.0043 lb. PM₁₀/ton HMA
- RAP feed bin (E-5) = 0.0033 lb. PM₁₀/ton HMA
- RAP grinder/crusher (E-6) = 0.0024 lb. PM₁₀/ton HMA
- Short conveyors (E-8b) = 0.0011 lb. PM₁₀/ton HMA

³ District calculated emission factors for PM₁₀, 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).

- Long conveyors (E-8c) = 0.0011 lb. PM₁₀/ton HMA
- Bucket elevator (E-9) = 0.0033 lb. PM₁₀/ton HMA
- Drag-slat conveyor (E-11a) = 0.00059 lb. PM₁₀/ton HMA
- Drag-chain conveyor (E-11b) = 0.00059 lb. PM₁₀/ton HMA
- Silos (E-12) = 0.00059 lb. PM₁₀/ton HMA
- Plant loadout (E-13) = 0.00052 lb. PM₁₀/ton HMA

ii. For each operating week the owner or operator shall monitor and record the results of the weekly visual inspection of the water suppression system. Records shall be made the day of the inspection and include:

- 1) Date of the inspection;
- 2) Name of the person that performed the inspection;
- 3) Description of any equipment defects observed including damages, leakage, corrosion, or other defects that would cause a reduction on the control efficiency;
- 4) Description of any repairs made or replacement of system components.

b. CO

i. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall comply with the following requirements or record a negative declaration for the reporting period:

- 1) The owner or operator shall maintain records, including calculations, which show the plant-wide total CO emissions based on the HMA produced during the consecutive 12 month period.
- 2) The owner or operator shall calculate 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

3) Using the above Emission Factors calculate the tons of CO emitted plant-wide as follows:

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

Where: E_{CO} = CO emissions (tons) emitted plant-wide

X = the amount of HMA produced (tons)

4) 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 based on the HMA produced during the consecutive 12 month period. 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_x**

i. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall comply with the following requirements or record a negative declaration for the reporting period:

- 1) The owner or operator shall maintain records, including calculations, which show the plant-wide total NO_x emissions based on the HMA produced during the consecutive 12 month period.
- 2) The owner or operator shall calculate NO_x 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 _x (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

3) Using the above Emission Factors calculate the tons of NO_x emitted plant-wide as follows:

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

Where: E_{NOX} = NO_x emissions (tons) emitted plant-wide

X = the amount of HMA produced (tons)

d. **SO₂**

i. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall comply with the following requirements or record a negative declaration for the reporting period:

- 1) The owner or operator shall maintain records, including calculations, which show the plant-wide total SO₂ emissions based on the HMA produced during the consecutive 12 month period.
- 2) The owner or operator shall calculate the SO₂ 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 ₂ (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

- 3) Using the above Emission Factors calculate the tons of SO₂ emitted plant-wide as follows:

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

Where: E_{SO₂} = SO₂ emissions (tons) emitted plant-wide

X = the amount of HMA produced (tons)

- ii. The owner or operator shall maintain a record of the fuel oil certifications.
- iii. The owner or operator shall keep receipts of each shipment of fuel oil received. The receipts shall include the date of delivery, the quantity of fuel oil received, the grade of fuel oil received and an analysis of the sulfur content of the fuel oil.

e. **VOC**

- i. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall comply with the following requirements or record a negative declaration for the reporting period:

- 1) The owner or operator shall maintain records, including calculations, which show the plant-wide total VOC emissions based on the HMA produced during the consecutive 12 month period.
- 2) 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

- 3) Using the above Emission Factors calculate the tons of VOC emitted plant-wide as follows:

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

Where: E_{VOC} = VOC emissions (tons) emitted plant-wide

X = the amount of HMA produced (tons)

- 4) 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 based on the HMA produced during the consecutive 12 month period. 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

f. **Unit Operation**

- i. The owner or operator shall monthly maintain records of the totals of the amounts of HMA produced during each month and consecutive twelve month period.
- ii. The owner or operator shall monthly maintain records of the totals of the amounts of No. 2 fuel oil used during each month and consecutive twelve month period.

S3. **Reporting** (Regulation 2.17, section 5.2)

The following information shall be included in the annual compliance report required by General Condition #12.

a. **PM₁₀**

- i. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall report the following plant-wide PM₁₀ emissions records in the annual compliance report or a negative declaration that no overages occurred:
 - 1) The beginning and end date of the reporting period.
 - 2) The plant-wide PM₁₀ emission totals caused by the HMA production overage during the reporting period.
- ii. The owner or operator shall report the following water suppression system records or report a negative declaration if no excursions occurred:
 - 1) The beginning and end dates of the reporting period;

- 2) Any deviation from the requirement to conduct or maintain records of the weekly visual inspection of the structural and mechanical integrity of the water dust suppression system.
 - 3) Any failure to operate or maintain the water suppression system which would have resulted in reduced control performance.
- b. **CO**
- i. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall report the following plant-wide CO emissions records in the annual compliance report or a negative declaration that no overages occurred:
 - 1) The beginning and end dates of the reporting period.
 - 2) The plant-wide CO emission totals caused by the HMA production overage during the reporting period.
- c. **NO_x**
- i. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall report the following plant-wide NO_x emissions records in the annual compliance report or a negative declaration that no overages occurred:
 - 1) The beginning and end dates of the reporting period.
 - 2) The plant-wide NO_x emission totals caused by the HMA production overage during the reporting period.
- d. **SO₂**
- i. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall report the following plant-wide SO₂ emissions records in the annual compliance report or a negative declaration that no overages occurred:
 - 1) The beginning and end date of the reporting period.
 - 2) The plant-wide SO₂ emission totals caused by the HMA production overage during the reporting period.
 - ii. The owner or operator shall report the following for the sulfur content limits or report a negative declaration if no excursions occurred:
 - 1) The beginning and end dates of the reporting period;
 - 2) Any failure to monitor or record fuel oil certifications or fuel oil shipment receipts;

- 3) Any exceedances of the fuel sulfur content standard.

e. **VOC**

- i. If HMA production exceeds the 125,000 ton/year limit the owner or operator shall report the following plant-wide VOC emissions records in the annual compliance report or a negative declaration that no overages occurred:
 - 1) The beginning and end dates of the reporting period.
 - 2) The plant-wide VOC emission totals caused by the HMA production overage during the reporting period.

f. **Unit Operation**

- i. The owner or operator shall report the following plant-wide Unit Operation records for HMA production:
 - 1) The beginning and end dates of the reporting period;
 - 2) The monthly and consecutive 12 month period totals of hot mix asphalt produced during the reporting period.
 - 3) A negative declaration if no production overages have occurred.
- ii. The owner or operator shall report the following plant-wide Unit Operation records for fuel oil usage:
 - 1) The beginning and end dates of the reporting period;
 - 2) The monthly and twelve consecutive month period totals of No. 2 fuel oil used during each month of the reporting period.
 - 3) A negative declaration if no usage overages have occurred.

Emission Unit U1: Aggregate Stockyard**U1 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.14	Control of Fugitive Particulate Emissions	2.4
6.09	Standards of Performance for Existing Process Operations	3.1, 3.2

U1 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
E-1	Limestone sand and aggregate stockpiles	6.09	C-3	NA	1970
E-2	Recycled Asphalt Product (RAP) aggregate stockpiles				
E-3	Haul roads, unpaved	1.14	C-3	NA	1970

U1 Control Devices:

Control ID	Description	Control Efficiency	Performance Indicator	Stack ID
C-3	Water suppression system	50%	NA	NA

U1 Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. PM/PM₁₀

- i. The owner or operator shall not cause or allow the emissions of particulate matter from the listed emission points to exceed the following limits: ⁴ (Regulation 6.09, section 3.2, Table 1)

Emission Point ID	Equipment	Capacity	PM Limit (lb /hr)
E-1	Limestone aggregate and sand stockpiles	21170 ft ³	55.73
E-2	RAP stockpile	21170 ft ³	55.73

- ii. The owner or operator shall not allow a road to be used without taking reasonable precautions to prevent particulate matter from becoming airborne beyond the work site. Such precautions shall include, where applicable, but shall not be limited to the following: (Regulation 1.14, section 2.1)

- 1) Applying and maintaining asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts, (Regulation 1.14, section 2.1.2)
- 2) Covering at all times, except when loading and unloading, open bodied trucks transporting materials likely to become airborne, (Regulation 1.14, section 2.1.4)
- 3) Maintaining paved roadways in a clean condition, (Regulation 1.14, section 2.1.6)
- 4) Removing earth or other material from paved streets which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water. (Regulation 1.14, section 2.1.7)

- iii. For additional PM₁₀ standards see Emission Unit Plant-wide.

b. Opacity

- i. The owner or operator shall not allow or cause visible emissions to equal or exceed 20% opacity. (Regulation 6.09, section 3.1)

⁴ The District has determined that the stockpiles under standard operating conditions cannot exceed hourly PM lb/hr limits uncontrolled.

- ii. The owner or operator shall not allow visible fugitive emissions beyond the lot line of the property on which the emissions originate. (Regulation 1.14, section 2.4)

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

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

a. PM/PM₁₀

- i. There are no monitoring or record keeping requirements related to the lb/hr emission standard for this emission unit to comply with Regulation 6.09.
- ii. The owner or operator shall keep records of vehicle miles traveled (VMT) and weights for the vehicles traveling on unpaved and paved roads.
- iii. For additional PM₁₀ monitoring and record keeping requirements see Emission Unit Plant-wide.

b. Opacity

- i. The owner or operator shall, monthly, conduct a one-minute visible emissions survey, during normal operation, of the emission points E-1, E-2, and E-3. 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.
- ii. At emission points (E-1, E-2, and E-3) where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.
- iii. The owner or operator shall, monthly, maintain records 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)**a. PM/PM₁₀**

- i. There are no reporting requirements related to the lb/hr emission standard for this emission unit to comply with Regulation 6.09.
- ii. For additional PM₁₀ reporting requirements see Emission Unit Plant-wide.

b. Opacity

- i. The owner or operator shall report the following emission unit opacity records or report a negative declaration if no exceedances occurred:
 - 1) The beginning and end date of the reporting period.
 - 2) The date, time and results of each visible emissions survey conducted that resulted in visible emissions being observed. If not visible emissions were observed during the reporting period, the owner or operator shall submit a negative declaration.
 - 3) The date, time and results of each Method 9 conducted. If there were no Method 9 tests performed during the reporting period, the owner or operator shall submit a negative declaration.
 - 4) A description of any corrective action taken for each exceedance of the opacity standard.

Emission Unit U2: Aggregate and RAP Processing**U2 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	3.11, 3.12

U2 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
E-4 (IA)	(4) Virgin aggregate cold-feed bins, 10'x12', with 5-hp D.C. drives	7.08	C-3	NA	1996
E-5 (IA)	(1) RAP feed bin				
E-6 (IA)	(1) Maxi-grind wood stump grinder used for initial RAP sizing				
E-7	(1) RAP shaker screen, 3/4" screen				
E-8a	(1) H&B variable speed belt, 24"x7' traveling under the bins				
E-8b (IA)	(1) Conveyor belt to RAP shaker screen (1) Conveyor belt from screen to RAP grinder (1) H&B conveyor from grinder to shaker				
E-8c (IA)	(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'				
E-9 (IA)	(1) H&B hot bucket elevator to mixing tower. Double chain				

U2 Control Devices:

Control ID	Description	Control Efficiency	Performance Indicator	Stack ID
C-3	Water suppression system	50%	NA	NA

U2 Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. PM/PM₁₀

- i. The owner or operator shall not cause or allow the emissions of particulate matter from the listed emission points to exceed the following limits: ⁵ (Regulation 7.08, section 3.1.2, Table 1)

Emission Point ID	Equipment	Capacity (ton/hour)	PM Limit (lb /hour)
E-4	Virgin aggregate cold-feed bins	40 each	29.57 each
E-5	RAP feed bin	40	29.57
E-6	Maxigrind grinder for RAP sizing	50	32.37
E-7	RAP shaker screen	200	38.83
E-8a	H&B variable speed belt	350	42.81
E-8b	Conveyor belt to RAP screen Conveyor belt to RAP grinder H&B conveyor from grinder to shaker	50 each	32.37 each
E-8c	H&B gathering conveyor H&B inclined conveyor H&B inclined conveyor	200 each	38.83 each
E-9	H&B hot bucket elevator	200	38.83

- ii. For additional PM₁₀ standards see Emission Unit Plant-wide.

b. Opacity

The owner or operator shall not allow or cause visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

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

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

a. PM/PM₁₀

- i. There are no monitoring or record keeping requirements related to the lb/hr emission standard for this emission unit to comply with Regulation 7.08.
- ii. For additional PM₁₀ monitoring and record keeping requirements see Emission Unit Plant-wide.

⁵ The District has determined that the aggregate processing emission from the Aggregate and RAP Processing systems, under standard conditions, cannot exceed the hourly PM lb/hr limits while operating uncontrolled.

b. Opacity

- i. The owner or operator shall, monthly, conduct a one-minute visible emissions survey, during normal operation, of the emission points E-4 through E-9. 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.
- ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.
- iii. The owner or operator shall, monthly, maintain records that show the results of all visible emissions surveys and Method 9 tests performed. The records shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what is any corrective action was taken to minimize visible emissions. If the process operation is not being operated during a given day, then no visible emission survey is required to be performed and a negative declaration shall be entered in the record.

S3. Reporting (Regulation 2.17, section 5.2)**a. PM/PM₁₀**

- i. There are no reporting requirements related to the lb/hr emission standard for this emission unit to comply with Regulation 7.08.
- ii. For additional PM₁₀ reporting requirements see Emission Unit Plant-wide.

b. Opacity

- i. The owner or operator shall report the following opacity records or a negative declaration if no exceedances occurred:
 - 1) The beginning and end date of the reporting period.
 - 2) 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 shall submit a negative declaration.
 - 3) The date, time and results of each Method 9 conducted. If there were no Method 9 tests performed during the reporting period, the owner or operator shall submit a negative declaration.
 - 4) A description of any corrective action taken for each exceedance of the opacity standard.

Emission Unit U3: HMA Production**U3 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	3.11, 3.12
7.09	Standard of Performance for New Process Gas Streams	4, 5
7.11	Standard of Performance For New Asphalt Paving Operations	3.1.1
40 CFR Part 60, Subpart I	Standards of Performance for Hot Mix Asphalt Facilities	§60.90 - §60.93

U3 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
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.	7.02, 7.09, 7.11, 40 CFR Part 60 Subpart I	C-1, C-2	S-1	2006
E-11a	Drag-slat conveyor, single chain, 30"x88', with 75-hp motor	7.08	NA	NA	2006
E-11b	H&B drag-chain conveyor				2006
E-12	H&B silo				2006
E-13 (IA)	Bituma-stor silo, with oil heated cone, with new style 2 1/2 ton batcher				2006

U3 Control Devices:

Control ID	Description	Control Efficiency	Performance Indicator	Stack ID
C-1	H&B process cyclone with H&B rotary conveyors, and dust silo with pneumatic blower	90%	VE survey	S-1
C-2	H&B baghouse, pulse-jet type, model DR8-10260, with fugitive dust fan, single auger, and knock-out box	95%	2" – 6" W.C. Pressure drop	S-1

U3 Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. PM/PM₁₀

- i. The owner or operator shall not discharge or cause to be discharged into the atmosphere from E-10 any gasses that contain particulate matter (PM) in excess of 90 mg/dscm (0.040 gr/dscf) based on one calendar day.⁶ (Regulation 7.11, section 3.1.1)(40 CFR 60.92(a)(1))
- ii. The owner or operator shall not cause or allow the emissions of particulate matter from the listed emission points to exceed the following limits:⁷ (Regulation 7.08, section 3.1.2, Table 1)

Emission Point ID	Equipment	Capacity (ton/hour)	Limit (lb /hr)
E-10	H&B batch-type asphalt mixing tower (pug mill), with aggregate dryer, hot bins, and aggregate weigh hopper.	200	38.83
E-11a	Drag-slat conveyor	400	44.14
E-11b	H&B drag chain conveyor	200	38.83
E-12	H&B silo	250	40.16
E-13	Bituma-stor silo, with oil heated cone, with new style 21/2 ton batcher	230	39.5

- iii. The owner or operator shall operate and maintain the process cyclone and baghouse at all times the associated emission point (E-10) is in operation to meet PM standards specified in this permit. (Regulation 2.17, section 5.1)
 - 1) The owner or operator shall daily operate and maintain the process cyclone and baghouse at all times the HMA batch mixer (E-10) is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice to meet the lb/hr emission standard.
 - 2) The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of the cyclone and baghouse for signs of damage, air leakage, corrosion, etc. and repairs shall be performed as needed.

⁶ A Method 5 stack test was performed on April 24, 2008 demonstrating that Riverside Paving’s batch mixer stack emissions do not exceed the gr/dscf standard when operated controlled.

⁷ The District has determined that the HMA production emission points E-11a, E11b, E-12, and E-13, under standard conditions, cannot exceed hourly PM lb/hr limits while operating uncontrolled

- iv. For additional PM₁₀ standards see Emission Unit Plant-wide.
- b. **Opacity**
- i. The owner or operator shall not discharge or cause to be discharged in to the atmosphere from the HMA batch mixer (E-10) any gasses that exhibit twenty percent (20%) opacity or greater. Where the presence of uncombined water is the only reason for failure to meet the requirements of this section, such failure shall not be a violation. (Regulation 7.11, section 3.1.2)(40 CFR 60.92(a)(2))
 - ii. The owner or operator shall not allow visible emissions from the HMA Production equipment E-11 through E-13 to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)
- c. **CO**
- i. The owner or operator of a facility shall not emit carbon monoxide gasses from the HMA batch mixer (E-10) unless they are burned at 1,300 °F for 0.5 seconds or greater in a direct flame afterburner or equivalent device equipped with a pyrometer that is positioned in the working area at the operator's eye level.⁸ (Regulation 7.09, section 5.1)
 - ii. For additional CO standards see Emission Unit Plant-wide.
- d. **NO_x**
- i. The owner or operator shall not discharge or cause to be discharged into the atmosphere from the HMA batch mixer E-10 any gases that contain the pollutant NO_x in excess of 300 ppm by volume, expressed as NO₂.⁹ (Regulation 7.08, section 4.1)
 - ii. For additional NO_x standards see Emission Unit Plant-wide.

⁸ 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.

⁹ Using worst case NO_x emissions combusting #2 fuel oil at less than 170 ppm, corrected to 3% O₂ dry, therefore the NO_x standard cannot be exceeded.

e. **SO₂**

- i. The owner or operator shall not allow the emissions from the HMA batch mixer (E-10) of the pollutant SO₂ to equal or exceed 40 tons during any twelve consecutive month period.¹⁰ (Regulation 7.09, section 4)
- ii. For additional SO₂ standards see Emission Unit Plant-wide.

f. **VOC**

- i. The owner or operator shall not use, sell for use, manufacture, mix or store cutback asphalts or unacceptable emulsion asphalts for asphalt paving operations, except as exempted in Regulation 7.11, section 5. (Regulation 7.11, section 4)
- ii. For additional VOC standards see Emission Unit Plant-wide.

g. **Unit Operation**

For the HMA batch mixer (E-10) production limitations and fuel combustion standards and limitations see Emission Unit Plant-wide.

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

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

a. **PM/PM₁₀**

- i. The owner or operator shall maintain daily records of the amount of HMA produced.
- ii. The owner or operator shall maintain daily records of any periods of time where the process was operating and the control devices (C-1, C-2) were not operating or a declaration that the control devices operated at all times that day when the HMA mixer was operating.
- iii. If there is any time that the control devices (C-1, C-2) for emission point E-10 is bypassed or not in operation when emission point E-10 is operating, then the owner or operator shall keep a record of the following for each bypass event:
 - 1) Date;
 - 2) Start time and stop time;

¹⁰ The production limit of 125,000 ton HMA/year reduces the emissions of criteria pollutant SO₂ to less than 40 tons during any twelve consecutive month period to comply with Regulation 7.09 and the additional requirements contained nthe Plant-wide emission unit will ensure that the 40 tpy limit is not exceeded.

- 3) Identification of the control device and process equipment;
 - 4) PM emissions during the bypass in lb/hr;
 - 5) Summary of the cause or reason for each bypass event;
 - 6) Corrective action taken to minimize the extent or duration of the bypass event; and
 - 7) Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.
- 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. Using the above Emission Factor, after a control device bypass, calculate the uncontrolled pounds of PM emitted as follows:

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

Where: E_{PM} = uncontrolled PM emissions (lbs) during a bypass event

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

- vi. The owner or operator shall, daily, monitor and record the pressure drop across the baghouse tube sheet (C-2) and note if the differential pressure is out of the range of 2-6" W.C.
- vii. Either record a negative declaration if no excursions were experienced during the reporting period or if there is any time that the control device (C-2) pressure drop is out of range when the associated HMA production equipment (E-10) is operating, then the owner or operator shall keep a record of the following for each excursion event:
- 1) Date;
 - 2) Start time and stop time;
 - 3) Identification of the control device and process equipment;
 - 4) PM emissions during the bypass in lb/hr;
 - 5) Summary of the cause or reason for each bypass event;
 - 6) Corrective action taken to minimize the extent or duration of the bypass event; and

- 7) Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.
- viii. The owner or operator shall monthly keep records of the visual inspection of the structural and mechanical integrity of the process cyclone and baghouse. Records shall include:
- 1) Date of the inspection;
 - 2) Name of the person that performed the inspection;
 - 3) Description of any equipment defects observed including damages, leakage, corrosion, or other defects that would cause a reduction on the control efficiency;
 - 4) Description of any repairs made or replacement of system components; and
 - 5) Description of all corrective actions taken to abate the situation.
- ix. If the control equipment (C-2) is bypassed, 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.¹¹

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

Where: E_{PM} = 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)¹²

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

- x. The owner or operator shall keep records of the preventative maintenance performed on the baghouse and be made available to the District upon request.
- xi. To monitor ongoing compliance with the PM emissions standard, the owner or operator of the baghouse shall comply with the following:

¹¹ 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.

¹² The District has assumed a 98% efficiency rate to determine uncontrolled emission factor from the controlled emission factor. This efficiency may be changed when the next Stack Test is performed.

- 1) The condition of the bags shall be checked on a bi-monthly basis and the bags shall be replaced as needed.
 - 2) A bi-monthly log of visual baghouse inspections shall be maintained.
 - 3) A bi-monthly log of bag replacements shall be maintained.
 - 4) A bi-monthly log of baghouse dust removal shall be maintained.
 - 5) Each baghouse shall be checked on an annual basis for ruptured bags, using fluorescent dye; the results of these tests shall be noted in the log book.
- xii. For additional PM₁₀ monitoring and record keeping requirements see Emission Unit Plant-wide.

b. Opacity

- i. For the baghouse (C-2), the owner or operator shall perform visible emissions surveys as required to be used as an indicator of performance in addition to verifying compliance with the opacity standard.
- ii. The owner or operator shall, weekly, conduct a one-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.
- iii. 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, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.
- iv. The owner or operator shall maintain records, weekly, 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 week, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

c. CO

- i. No monitoring or record keeping is required to show compliance with the process burn temperatures related to Regulation 7.09.

- ii. For additional CO monitoring and record keeping requirements see Emission Unit Plant-wide.

d. **NO_x**

- i. No monitoring or record keeping is required to show compliance with the parts-per-million discharge standard related to Regulation 7.08.
- ii. For additional NO_x monitoring and record keeping requirements see Emission Unit Plant-wide.

e. **SO₂**

For additional SO₂ monitoring and record keeping requirements see Emission Unit Plant-wide.

f. **VOC**

- i. The manufacturer of cutback or emulsified asphalt shall maintain a current record in a format approved by the District for each batch of cutback or emulsified asphalt produced. The record shall contain the following information as a minimum or a negative declaration if no cutback has been used during the reporting period:

- 1) The calendar date that the batch was produced;
- 2) The quantity in tons produced;
- 3) The customer's name and address to where the cutback or emulsified asphalt was sent; and,
- 4) For emulsified asphalt only, the oil distillate (organic solvent as determined by ASTM D-244). The District may accept, instead of ASTM D-244, a certification by the emulsified asphalt manufacturer of the composition of the batch if supported by actual batch formulation records.

- ii. For additional VOC monitoring and record keeping requirements see Emission Unit Plant-wide.

g. **Unit Operation**

For fuel combustion monitoring and record keeping requirements for the batch mixer (E-10) see Emission Unit Plant-wide.

S3. **Reporting** (Regulation 2.17, section 5.2)

a. **PM/PM₁₀**

- i. The owner or operator shall report the following baghouse monitoring records or a declaration if no excursions occurred:
 - 1) The beginning and end dates of the reporting period;
 - 2) Any failure to daily monitor or record the pressure drop for the baghouse;
 - 3) Any excursions from the stipulated pressure drop that would indicate an interruption of baghouse performance.
 - ii. The owner or operator shall report the following baghouse bypass records or a negative declaration if no bypass occurred:
 - 1) The beginning and end dates of the reporting period;
 - 2) The number of times the PM vent stream bypassed the control device and is vented to the atmosphere;
 - 3) The duration of each bypass to the atmosphere
 - 4) The calculated pound per bypass event PM emissions for each bypass.
 - iii. The owner or operator shall report the following uncontrolled stack emissions records or A negative declaration if no uncontrolled or limit exceedances occurred:
 - 1) The beginning and end dates of the reporting period;
 - 2) The number of times the baghouse operated uncontrolled;
 - 3) The calculated gr/cf emissions during the uncontrolled event;
 - 4) The number of times the gr/cf standard was exceeded;
 - 5) The calculated gr/cf emissions during the exceedance;
 - 6) The reason for the exceedance
 - iv. The owner or operator shall report the following process cyclone and baghouse records or a negative declaration if no visual inspections of the structural and mechanical integrity were missed during the reporting period:
 - 1) The beginning and end dates of the reporting period;
 - 2) Any deviation from the requirement to conduct or maintain records of the weekly visual inspection of the structural and mechanical integrity of the process cyclone and baghouse.
 - v. For additional PM₁₀ reporting requirements see Emission Unit Plant-wide.
- b. **Opacity**

- i. The owner or operator shall report the following opacity records or a negative declaration if no exceedances occurred:
 - 1) The beginning and end date of the reporting period.
 - 2) The date, time and results of each visible emissions survey conducted that resulted in visible emissions being observed. If not visible emissions were observed during the reporting period, the owner or operator shall submit a negative declaration.
 - 3) The date, time and results of each Method 9 conducted. If there were no Method 9 tests performed during the reporting period, the owner or operator shall submit a negative declaration.
 - 4) A description of any corrective action taken for each exceedance of the opacity standard.

c. **CO**

- i. There are no CO emissions reporting requirements for this emission unit related to Regulation 7.09.
- ii. For additional CO reporting requirements see Emission Unit Plant-wide.

d. **NO_x**

- i. There are no additional NO_x reporting requirements for this emission unit related to Regulation 7.08.
- ii. For additional NO_x reporting requirements see Emission Unit Plant-wide.

e. **SO₂**

For additional SO₂ reporting requirements see Emission Unit Plant-wide.

f. **VOC**

- i. There are no additional VOC reporting requirements for this emission unit related to Regulation 7.11.
- ii. For additional VOC reporting requirements see Emission Unit Plant-wide.

g. **Unit Operation**

For additional Unit Operation reporting requirements for the batch mixer (E-10) see Emission Unit Plant-wide.

S4. **Testing** (Regulation 2.17, section 5.2)

The owner or operator shall conduct performance testing in a manner consistent with the following testing requirements.

General Testing Requirements:

Plant-wide the owner or operator shall retest control device (C-2) within ten (10) years since the most recent District accepted performance test or within 180 days after the effective date of the permit if no previous test has been performed, unless the District requires a different time schedule. For equipment which has been tested but not within ten years prior to the effective date of this permit the Company may submit within 90 days of the effective date of this permit, contingent on approval by the District, a schedule which shall at a minimum propose testing for all affected equipment within this permit cycle. Thereafter the Company shall retest each affected device at least once every 10 years. Devices of adequately similar design and filter media may be represented by a common performance test contingent upon review and approval by the District of the testing protocol. In lieu of the control efficiency testing, unless required by a Federal Regulation, the owner or operator may submit a signature guarantee from the control device manufacturer stating the control device efficiency.

The owner or operator shall use the most recent District accepted performance test results to demonstrate compliance with the emission limits and in the annual emission inventory reporting.

If performance testing is not completed by the required date, then the company shall calculate emissions using expired test result data or methods such as EPA approved emission factors and guidance documents such as EIIP and AP-42 or other methods upon written approval by the District, whichever results in the greater (more conservative) emissions.

a. **PM/PM₁₀**

- i. The owner or operator shall perform an EPA Reference Method 5 PM performance test on the inlet and outlet of the control device or emission point to determine the emission rate and control efficiency. The test shall be performed at 90% or higher of maximum capacity, or allowable/permitted capacity, or at a level of capacity which results in the greatest emissions and is representative of the operations. Failure to perform the test, at maximum capacity, allowable/permitted capacity, or at a level of capacity which resulted in the greatest emissions, may necessitate a re-test or necessitate a revision of the allowable/permitted capacity of the process equipment depending upon the difference between the testing results and the limit.
- ii. The owner or operator shall submit written compliance test plans (protocol) for the control efficiency. They shall include the EPA test methods that will be used for PM compliance testing, the process operating parameters that will be monitored during the performance test,

and the control device performance indicators (e.g. pressure drop) that will be monitored during the performance test. The compliance test plans shall be furnished to the District at least 30 days prior to the actual date of the performance test. Attached to the permit is a Protocol Checklist for a Performance Test with the information to be submitted in the protocol.

- iii. The owner or operator shall provide the District at least 10 days prior notice of any performance test to afford the District the opportunity to have an observer present.
- iv. The owner or operator shall furnish the District with a written report of the results of the performance test within 60 days following the actual date of completion of the performance test.

b. **Opacity**

The owner or operator shall demonstrate compliance with the opacity limit by initially conducting a test in accordance with Method 9 of 40 CFR 60 Appendix A at the same time as the Method 5 PM performance test. The test shall be performed at maximum capacity or allowable/permitted capacity or at a level of capacity which results in the greatest emissions and is representative of the operations. Failure to perform the test at these conditions may necessitate a re-test. The maximum 6-minute average opacity exhibited during the test period shall be used to determine whether the affected source is in initial compliance with the standard. The duration of the Method 9 performance test shall be 3 hours (30 6-minute averages).

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 ₁₀ = 1.33	Regulation 1.02
Aggregate grinder	Maxigrind grinder, 50 tph	1	PM ₁₀ = 0.53	Regulation 1.02
Short conveyors	Conveyor belts, 50 tph each	3	PM ₁₀ = 0.24	Regulation 1.02
Inclined conveyors	Conveyor belts, 200 tph each	3	PM ₁₀ = 0.96	Regulation 1.02
Hot elevator	Hot bucket elevator to mixer, 200 tph	1	PM ₁₀ = 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. See IA Unit IA-1	1	VOC = 0.069	Regulation 1.02
Liquid storage tank	Tank for transfer hot oil, 10000 gallon. See IA Unit IA-1	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 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.

IA-1: Storage Tanks

IA-1 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	1 through 4

IA-1 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
E-14 (IA)	Gencor model Hy-way liquid asphalt coiled tank, with supply pump/loading pump, 20,000 gallon	7.12	NA	NA	1996
E-15 (IA)	Diesel fuel storage tank for Gencor transfer hot oil transfer machine, 10,000 gallon		NA	NA	2001

IA-1 Specific Conditions

S1. Standards (Regulation 2.17, section 5.1)

a. VOC

- i. The owner or operator shall not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia in the storage vessel(s), unless the storage tank is equipped with a permanent submerged fill pipe.¹³ (Regulation 7.12, section 3.3)
- ii. For additional VOC standards see Emission Unit Plant-wide.

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

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

a. VOC

- i. The owner or operator of the storage vessel(s) shall maintain records of the material stored and the vapor pressure in each storage vessel and if the contents of the storage vessel(s) are changed a record shall be made of the

¹³ The District has determined that the Storage Tanks under standard conditions and stated vapor pressure limits cannot exceed the VOC standard while operating uncontrolled.

new contents, the date of the change, and the new vapor pressure in order to demonstrate compliance.

- ii. The owner or operator shall keep a record that shows if the storage vessel is equipped with a submerged fill pipe. Submerged fill pipe means any fill pipe the discharge of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean every fill pipe the discharge opening of which is entirely submerged when the liquid level is 2 times the fill pipe diameter above the bottom of the tank.
- iii. For additional VOC monitoring and record keeping requirements see Emission Unit Plant-wide.

S3. Reporting (Regulation 2.17, section 5.2)

a. **VOC**

- i. There are no VOC reporting requirements for this emission unit related to Regulation 7.12.
- ii. For additional VOC reporting requirements see Emission Unit Plant-wide.

IA-2: Parts Washer**IA-2 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.18	Standards of Performance for Solvent Metal Cleaning Equipment	4

IA-2 Equipment:

Emission Point	Description	Applicable Regulation	Control ID	Stack ID	Installation Date
E-16	Cold solvent washer for metal parts cleaning, pump with cleaning brush, no conveyor, with secondary reservoir, 50 gallon	6.18	NA	NA	1998

IA-2 Specific Conditions**S1. Standards** (Regulation 2.17, section 5.2)**a. VOC**

- i. The owner or operator shall install, maintain, and operate the cold solvent metal parts washer control equipment as follows: (Regulation 6.18, section 4)
 - 1) The cold cleaner shall be equipped with a tightly fitting cover that is free of cracks, holes, or other defects. If the solvent is agitated or heated, then the cover shall be designed so that it can be easily operated with 1 hand. (Regulation 6.18, section 4.1.1)
 - 2) The cold cleaner shall be equipped with a drainage facility that is designed so that the solvent that drains off parts removed from the cleaner will return to the cold cleaner. The drainage facility may be external if the District determines that an internal type cannot fit into the cleaning system. (Regulation 6.18, section 4.1.2)
 - 3) A permanent, conspicuous label summarizing the operating requirements specified in Specific Condition S1.a.ii. shall be installed on or near the cold cleaner. (Regulation 6.18, section 4.1.3)
 - 4) If used, the solvent spray shall be a fluid stream, not a fine, atomized, or shower type spray, at a pressure that does not cause excessive splashing. Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaner. Solvent flow shall be directed downward

- to avoid turbulence at the air-solvent interface and to prevent solvent from splashing outside of the cold cleaner. (Regulation 6.18, section 4.1.4)
- 5) Work area fans shall be located and positioned so that they do not blow across the opening of the cold cleaner. (Regulation 6.18, section 4.1.6)
 - 6) The solvent-containing portion of the cold cleaner shall be free of all liquid leaks. Auxiliary cold cleaner equipment such as pumps, water separators, steam traps, or distillation units shall not have any visible liquid leaks, visible tears, or cracks. (Regulation 6.18, section 4.1.8)
- ii. The owner or operator of the parts washer shall observe at all times the following operating requirements: (Regulation 6.18, section 4.2)
- 1) Waste solvent shall neither be disposed of nor transferred to another party in a manner such that more than 20% by weight of the waste solvent can evaporate. Waste solvent shall be stored only in a covered container. A covered container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container. (Regulation 6.18, section 4.2.1)
 - 2) The solvent level in the cold cleaner shall not exceed the fill line. (Regulation 6.18, section 4.2.2)
 - 3) The cold cleaner cover shall be closed whenever a part is not being handled in the cold cleaner. (Regulation 6.18, section 4.2.3)
 - 4) Parts to be cleaned shall be racked or placed into the cold cleaner in a manner that will minimize drag-out losses. (Regulation 6.18, section 4.2.4)
 - 5) Cleaned parts shall be drained for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping, or rotating, the parts shall be positioned so that the solvent drains directly back to the cold cleaner. (Regulation 6.18, section 4.2.5)
 - 6) A spill during solvent transfer shall be cleaned immediately, and the wipe rags or other sorbent material shall be immediately stored in a covered container for disposal or recycling, unless enclosed storage of these items is not allowed by fire protection authorities. (Regulation 6.18, section 4.2.6)
 - 7) Sponges, fabric, wood, leather, paper products, and other absorbent material shall not be cleaned in a cold cleaner. (Regulation 6.18, section 4.2.7)

- iii. The owner or operator shall not operate a cold cleaner using a solvent with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F). (Regulation 6.18, section 4.3.2)
- iv. For additional VOC standards see Emission Unit Plant-wide.

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

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

a. VOC

- i. For the cold parts washer the owner or operator shall maintain records that include the following for each solvent purchase.
 - 1) The name and address of the solvent supplier,
 - 2) The date of the purchase,
 - 3) The type of the solvent, and
 - 4) The vapor pressure of the solvent measured in mm Hg at 20°C (68°F).
- ii. For additional VOC monitoring and record keeping requirements see Emission Unit Plant-wide.

S3. Reporting (Regulation 2.17, section 5.2)

a. VOC

- i. For the cold parts washer, there are no routine compliance reporting requirements for Regulation 6.18.
- ii. For additional VOC reporting requirements see Emission Unit Plant-wide.

Idled Equipment:

The owner or operator must inform the District prior to reinstating any of these idled units.

Emission Point	Description	Capacity	Stack ID	Install Date
Storage Tank	H&B liquid asphalt storage tank #1	35000 gallon	NA	1996
Storage Tank	H&B liquid asphalt storage tank #2	35000 gallon	NA	1996
Storage Tank	H&B No. 2 fuel oil storage tank	15000 gallon	NA	1996
Bin/Hopper	Virgin aggregate cold-feed bins, 10'x12', with 5-hp D.C. drives	50 tph	NA	1996
Screen	Diester 5'x16' incline shaker screen	50 tph	NA	1996
Screen	H&B shaker screens #1	200 tph	NA	1996
Screen	H&B shaker screens #2	200 tph	NA	1996
Screen	H&B shaker screens #3	200 tph	NA	1996
Batch Tower	Madsen batch tower with Madsen rotary dryer, rated at 400 lb, Systems for weighing, screening and loading, raw materials stored in piles	180000 tpy	S-1	1996
Process Cyclone	Madsen process cyclone	43000 acfm	S-1	1973
Baghouse	Madsen-Gentec baghouse			
Storage Bin	Add-A-Bin storage bin #1 for finished product	155 tons	NA	1973
Storage Bin	Add-A-Bin storage bin #2 for finished product	155 tons	NA	1973

Fee Comment

1. On May 15, 2013, the Board approved revisions to Regulation 2.08, which implemented a new fee structure. As a result, Riverside Paving and Contracting, Inc. will be required to pay annual fees.

Attachment A - 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.