MAR 3 1 2015
Candice Longnecker
Granite Construction, Coalinga
P O Box 15287
Sacramento, CA 95851

Re Notice of Preliminary Decision - Authority to Construct
Facility Number: C-590
Project Number: C-1150587

Dear Ms. Longnecker,

Enclosed for your review and comment is the District’s analysis of Granite Construction, Coalinga’s application for an Authority to Construct for replacement of the existing 120 MMBtu/hr asphalt dryer with a 135 MMBtu/hr asphalt dryer. The facility is also proposing to add three aggregate bins and two aggregate conveyors and the addition of new dry lime equipment, at 38940 Highway 33, Coalinga, CA.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice period, the District intends to issue the Authority to Construct. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Stanley Tom of Permit Services at (559) 230-5900.

Sincerely,

[Signature]
Arnaud Marjollet
Director of Permit Services

AM st
Enclosures

cc Mike Tollstrup, CARB (w/ enclosure) via email
San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
Hot Mix Asphalt Operation – Replace Dryer and Add Dry Lime Equipment

Facility Name: Granite Construction, Coalinga
Mailing Address: P O Box 15287
Sacramento, CA 95851
Contact Person: Candice Longnecker
Telephone: (916) 855-4473
Application #(s): C-590-9-8, '10-3, and '18-0
Project #: C-1150587
Deemed Complete: March 6, 2015

I PROPOSAL

Granite Construction, Coalinga is requesting an Authority to Construct permit to replace the 120 MMBtu/hr dryer equipped with a North American burner listed in permit C-590-9 with a 135 MMBtu/hr dryer equipped with a Genco Equinox burner with flue gas recirculation. The facility is also proposing to add three cold feed bins and two conveyors to permit C-590-10 and the addition of new dry lime equipment consisting of a pugmill, pugmill conveyor, and two lime silos served by a baghouse.

This facility is not a major source for any pollutant.

II. APPLICABLE RULES

Rule 2201 New and Modified Stationary Source Review Rule (4/21/11)
Rule 2410 Prevention of Significant Deterioration (6/16/11)
Rule 2520 Federally Mandated Operating Permits (6/21/01)
Rule 4001 New Source Performance Standards (4/14/99)
Rule 4002 National Emission Standards For Hazardous Air Pollutants (5/20/04)
Rule 4101 Visible Emissions (2/17/05)
Rule 4102 Nuisance (12/17/92)
Rule 4201 Particulate Matter Concentration (12/17/92)
Rule 4202 Particulate Matter Emission Rate (12/17/92)
Rule 4301 Fuel Burning Equipment (12/17/92)
Rule 4309 Dryers, Dehydrators, and Ovens (12/15/05)
Rule 4641 Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations (12/17/92)
Rule 4801 Sulfur Compounds (12/17/92)
CH&SC 41700 Health Risk Assessment
CH&SC 42301 6 School Notice
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387 California Environmental Quality Act (CEQA) Guidelines
III. PROJECT LOCATION

The equipment will be located at 38940 Highway 33 in Coalinga, California. The District has verified that the facility is not located within 1,000 feet of the outer boundary of any K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301 is not required for this project.

IV. PROCESS DESCRIPTION

Aggregate from stockpiles are loaded into the feed hopper using front-end loaders. The conveyor then transports the aggregate to the dryer. The dryer tumbles the aggregate while hot air is passed through the aggregate to remove the moisture. After drying, asphalt oil is introduced into the drum and mixed with aggregate. The finished product is either introduced to a conveyor belt to be transported to the storage silo or it is directly loaded into an awaiting truck.

Hot mix asphalt (HMA) paving materials are a mixture of well-graded, high-quality aggregate (which can include reclaimed asphalt pavement [RAP]) and liquid asphalt cement, which is heated and mixed in measured quantities to produce HMA. Aggregate and RAP (if used) constitutes over 92 percent by weight of the total mixture. Aside from the amount and grade of asphalt cement used, mix characteristics are determined by the relative amounts and types of aggregate and RAP used. A certain percentage of fine aggregate (less than 74 µm in physical diameter) is required for the production of good quality HMA.

The Drum Mix Process is a continuous mixing type process, using proportioning cold feed controls to introduce the raw materials in the process. The major difference between this process and the batch process is that the dryer is used not only to dry the material but also to mix the heated and dried aggregates with the liquid asphalt cement.

The HMA process starts with different grades (sizes) of aggregate loaded into feed bins which meters different sized aggregate onto a conveyor belt. The aggregate, which has been proportioned by size gradations, is introduced to the drum. As the drum rotates, the aggregates, as well as the combustion products, move toward the other end of the drum. Liquid asphalt cement flow is controlled by a variable flow pump electronically linked to the new (virgin) aggregate and RAP weigh scales. The asphalt cement is introduced in the mixing zone midway down the drum in a lower temperature zone, along with any RAP and particulate matter (PM) from collectors. The mixture is discharged at the end of the drum and is conveyed to either a surge bin or HMA storage silos for loadout. The exhaust gases also exit the end of the drum and pass on to the collection system. Typically, the drum mixer is followed by primary collection equipment (usually a baghouse or venturi scrubber). However, because the mixing of aggregate and liquid asphalt cement occurs in the hot combustion product flow, organic emissions (gaseous and liquid aerosol) are created.

The facility is proposing the replacement of the dryer drum and burner, and the addition of dry lime equipment at the hot mix asphalt (HMA) facility. The equipment will allow the facility to
produce hot mix asphalt for two Caltrans pavement rehabilitation projects in Kettleman City on Interstate 5 and in Lemoore on Highway 198. Both projects require the use of 25% Recycled Asphalt Pavement (RAP) in their HMA. In order to produce HMA with this percentage of RAP, the facility needs to install a counterflow drum and more efficient burner. Additionally, the aggregate used in the HMA production requires lime treatment.

V EQUIPMENT LISTING

Pre-Project Equipment Description

<table>
<thead>
<tr>
<th>Current Permit #</th>
<th>Pre-Project Equipment Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-590-9-7</td>
<td>ASPHALTIC CONCRETE BATCH PLANT WITH 120 MMBTU/HR NORTH AMERICAN LOW NOX BURNER SERVED BY BMG MODEL BH4505-S PULSE JET BAGHOUSE, A WARM ASPHALT MIX SYSTEM, A LIQUID ANTI-STRIP METERING SYSTEM AND TWO EXEMPT 30 KGA ASPHALT OIL STORAGE TANKS WITH 2 1 MMBTU/HR NATURAL GAS FIRED HEAT TRANSFER SYSTEM AND DEMISTER SYSTEM</td>
</tr>
<tr>
<td>C-590-10-2</td>
<td>AGGREGATE HANDLING OPERATION CONSISTING OF SEVEN COLD AGGREGATE FEED BINS WITH SEVEN BELT FEEDERS, ASSOCIATED BELT CONVEYORS, WATER SPRAY BARS, PARALLEL CONVEYOR BELT, AND TWO VIBRATING SCREENS PROVIDING RAW MATERIAL FOR A HOT MIX (C-0590-9) AND RECLAIMED ASPHALT PAVEMENT OPERATION</td>
</tr>
</tbody>
</table>

ATC Permit Equipment Description

<table>
<thead>
<tr>
<th>ATC Permit #</th>
<th>ATC Permit Equipment Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-590-9-8</td>
<td>MODIFICATION OF ASPHALTIC CONCRETE BATCH PLANT WITH 120 MMBTU/HR NORTH AMERICAN LOW NOX BURNER SERVED BY BMG MODEL BH4505-S PULSE JET BAGHOUSE, A WARM ASPHALT MIX SYSTEM, A LIQUID ANTI-STRIP METERING SYSTEM AND TWO EXEMPT 30 KGA ASPHALT OIL STORAGE TANKS WITH 2 1 MMBTU/HR NATURAL GAS FIRED HEAT TRANSFER SYSTEM AND DEMISTER SYSTEM REPLACE DRYER WITH A 135 MMBTU/HR DRYER EQUIPPED WITH A GENCO EQUINOX LOW NOX BURNER WITH FLUE GAS RECIRCULATION</td>
</tr>
<tr>
<td>C-590-10-3</td>
<td>MODIFICATION OF AGGREGATE HANDLING OPERATION CONSISTING OF SEVEN COLD AGGREGATE FEED BINS WITH SEVEN BELT FEEDERS, ASSOCIATED BELT CONVEYORS, WATER SPRAY BARS, PARALLEL CONVEYOR BELT, AND TWO VIBRATING SCREENS PROVIDING RAW MATERIAL FOR A HOT MIX (C-0590-9) AND RECLAIMED ASPHALT PAVEMENT OPERATION ADD THREE COLD AGGREGATE FEED BINS AND TWO CONVEYORS</td>
</tr>
</tbody>
</table>
C-590-18-0

**DRY LIME OPERATION CONSISTING OF A SCREW PUGMILL, A PUGMILL BELT CONVEYOR, AN ENCLOSED LIME FEEDER BELT, A LIME AUGER, AN UNLOADING LIME BLOWER, AND TWO LIME STORAGE SILOS SERVED BY TWO DUSTY DUSTLESS BAGHOUSES**

### Detailed Equipment Listing (S-590-18-0)

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Motor Power Rating (hp)</th>
<th>Quantity</th>
<th>Total Power Rating (hp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twin screw pugmill</td>
<td>60</td>
<td>2</td>
<td>120</td>
</tr>
<tr>
<td>Pugmill belt conveyor</td>
<td>25</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Aggregate scale conveyor</td>
<td>Existing</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Lime feeder belt (scale-enclosed)</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lime auger</td>
<td>10</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Water pump</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Vane feeder (lime feeder) silo</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Lime storage silo</td>
<td>N/A</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>Lime blower – unloading</td>
<td>50</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>Baghouse shaker</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Drives</td>
<td>40</td>
<td>4</td>
<td>160</td>
</tr>
<tr>
<td>Blower</td>
<td>30</td>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>Turboblower</td>
<td>75</td>
<td>1</td>
<td>75</td>
</tr>
</tbody>
</table>

**TOTAL Electrical hp** 480

### Post-Project Equipment Description

<table>
<thead>
<tr>
<th>Proposed Permit #</th>
<th>Post-Project Equipment Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-590-9-8</td>
<td>ASPHALTIC CONCRETE BATCH PLANT WITH 135 MMBTU/HR DRYER EQUIPPED WITH A GENCO EQUINOX LOW NOX BURNER WITH FLUE GAS RECIRCULATION SERVED BY BMG MODEL BH4505-S PULSE JET BAGHOUSE, A WARM ASPHALT MIX SYSTEM, A LIQUID ANTI-STRIP METERING SYSTEM AND TWO EXEMPT 30 K GAL ASPHALT OIL STORAGE TANKS WITH 21 MMBTU/HR NATURAL GAS FIRED HEAT TRANSFER SYSTEM AND DEMISTER SYSTEM</td>
</tr>
<tr>
<td>C-590-10-3</td>
<td>AGGREGATE HANDLING OPERATION CONSISTING OF TEN COLD AGGREGATE FEED BINS WITH SEVEN BELT FEEDERS, ASSOCIATED BELT CONVEYORS, WATER SPRAY BARS, PARALLEL CONVEYOR BELT, AND TWO VIBRATING SCREENS PROVIDING RAW MATERIAL FOR A HOT MIX (C-0590-9) AND RECLAIMED ASPHALT PAVEMENT OPERATION</td>
</tr>
<tr>
<td>C-590-18-0</td>
<td>DRY LIME OPERATION CONSISTING OF A SCREW PUGMILL, A PUGMILL BELT CONVEYOR, AN ENCLOSED LIME FEEDER BELT, A LIME AUGER, AN UNLOADING LIME BLOWER, AND TWO LIME STORAGE SILOS SERVED BY TWO DUSTY DUSTLESS BAGHOUSES</td>
</tr>
</tbody>
</table>
VI. EMISSION CONTROL TECHNOLOGY EVALUATION

The dryer burner generates NOx, SOx, PM10, CO and VOC emissions from the combustion of natural gas. The unit is equipped with a low NOx burner and emissions from the drum mixer are controlled by a pulse-jet baghouse. Properly maintained and operated, a baghouse is expected to achieve a control efficiency of at least 99.9% for PM10. The baghouse dust collector appears to be properly designed, as demonstrated by the following control equipment sizing calculations based on manufacturer’s specifications.

**Design check calculations**

**Air Flow Calculations for the hot mix asphalt dust collector**

\[
\text{Airflow} = 75,000 \text{ ft}^3/\text{min} \quad \text{(per Applicant)} \\
\text{Air/Cloth Ratio} = \frac{\text{Air Flow Rate}}{\text{Cloth Area}} = \frac{75,000 \text{ cfm}}{14,748 \text{ ft}^2} = 5.08 \text{ ft/min}
\]

**Air Flow Calculations for the lime silo dust collector**

\[
\text{Airflow} = 690 \text{ ft}^3/\text{min} \quad \text{(per Applicant)} \\
\text{Air/Cloth Ratio} = \frac{\text{Air Flow Rate}}{\text{Cloth Area}} = \frac{690 \text{ cfm}}{140 \text{ ft}^2} = 5 \text{ ft/min}
\]

The pulse jet cleaning mechanism uses a high pressure jet of air to remove the dust from the bags. The dust cake is removed from the bag by a blast of compressed air injected into the top of the bag tube. The air blast causes the bag to flex or expand as the shock wave travels down the bag tube. As the bag tube flexes, the dust cake fractures and deposited particulates are discharged from the bag. Pulse jet baghouses are generally designed with air-to-cloth ratio (filtering velocity) between 5 and 15 ft/min.

The air/cloth ratio is within the typical values found in the Air Pollution Engineering Manual (Reference from Air Pollution Engineering Manual, Air & Waste Management Association – 1992 Table 5, page 128). Therefore, the dust collector is operating within the recommended parameters.

The emissions from the feed bins are particulate dust (PM10) which are controlled by the use of spray bars at the feed bin dump points and conveyor drop points.
VII GENERAL CALCULATIONS

A Assumptions

C-590-9-8

- F-Factor for Natural Gas = 8,710 dscf/MMBtu
- Higher Heating Value for Natural Gas = 1,000 Btu/scf (District assumption)
- Hot Mix Asphalt production = 8,000 tons/day and 822,150 tons/year (current PTO)
- Natural gas fuel usage = 1,946,096 ft³/day and 200 million ft³/year (current PTO)
- Pre-project Annual hours of operation
  \[= 200 \text{ million ft}^3/\text{year} \times 1000 \text{ Btu/ft}^3 = 120 \text{ MMBtu/hr}\]
  \[= 1,666 \frac{3}{2} \text{ hr/year}\]
- Post-project Annual hours of operation
  \[= 200 \text{ million ft}^3/\text{year} \times 1000 \text{ Btu/ft}^3 = 135 \text{ MMBtu/hr}\]
  \[= 1,481 \text{ hr/year}\]

C-590-10-3

- Total feed bin aggregate raw material throughput shall not exceed 7,520 tons per day (current PTO)
- Total aggregate raw material throughput for each aggregate conveyor #1 and #2 shall not exceed 6,000 tons per day (per applicant)
- Total feed bin aggregate raw material throughput for each cold feed bin #1, #2, and #3 shall not exceed 4,000 tons per day (per applicant)

C-590-18-0

- Maximum process weight rate = 100 tons/day (per applicant)
- Water is introduced into the pugmill to facilitate the mixing of the lime and aggregate to bring the moisture content of the lime-coated aggregate to 3% Therefore, controlled emission factors will be used for points where water has been introduced

B Emission Factors

Pre-Project Emission Factors

C-590-9-7

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>ppmv @ 19% O2</th>
<th>EF1</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOₓ</td>
<td>4 3</td>
<td>0.0492 lb/MMBtu</td>
<td>Current PTO</td>
</tr>
<tr>
<td>SOₓ</td>
<td>-</td>
<td>0.19 lb/hr</td>
<td>Current PTO</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>-</td>
<td>0.008 lb/ton</td>
<td>Current PTO</td>
</tr>
<tr>
<td>CO</td>
<td>34.5</td>
<td>0.24 lb/MMBtu</td>
<td>Current PTO</td>
</tr>
<tr>
<td>VOC</td>
<td>-</td>
<td>0.017 lb/MMBtu</td>
<td>Current PTO</td>
</tr>
</tbody>
</table>
C-590-10-2

**Current Aggregate Processing Emission Factors**

<table>
<thead>
<tr>
<th>Process</th>
<th>Current EF1 (lb PM$_{10}$/ton)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drop point</td>
<td>0 000048</td>
<td>Current PTO</td>
</tr>
<tr>
<td>Drop point</td>
<td>0 000048</td>
<td>Current PTO</td>
</tr>
<tr>
<td>Screen</td>
<td>0 00084</td>
<td>Current PTO</td>
</tr>
<tr>
<td>Total</td>
<td>0 00094</td>
<td></td>
</tr>
</tbody>
</table>

The current drop point and screen emission factors were revised in project C-1000846 to reflect the most up to date AP-42 emission factors which were in Table 11 19 2-2. January 1995 AP-42 Table 11 19 2-2 has been updated since then in August 2004. The drop point and screen emission factors will be revised in this project to reflect the most up to date AP-42 emission factors. The emission factors will be revised pursuant to District Policy APR 1110. Per District Policy APR 1110, revision of the emission factors will have no NSR implications.

**Revised Aggregate Processing Emission Factors**

<table>
<thead>
<tr>
<th>Process</th>
<th>Revised EF1 (lb PM$_{10}$/ton)</th>
<th>Source</th>
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<tbody>
<tr>
<td>Drop point</td>
<td>0 000046</td>
<td>AP-42 Table 11 19 2-2 (8/04)</td>
</tr>
<tr>
<td>Drop point</td>
<td>0 000046</td>
<td>AP-42 Table 11 19 2-2 (8/04)</td>
</tr>
<tr>
<td>Screen</td>
<td>0 00074</td>
<td>AP-42 Table 11 19 2-2 (8/04)</td>
</tr>
<tr>
<td>Total</td>
<td>0 00083</td>
<td>-</td>
</tr>
</tbody>
</table>

**Post-Project Emission Factors**

C-590-9-8

The manufacturer has provided emission guarantees for the new dryer. However, the provided values are based on typical operation and may vary depending on the type of product being produced. To provide a margin of compliance, the applicant has proposed to limit the dryer emissions to the values listed on the current permit.

**Dryer (Natural Gas Fuel)**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>ppmv @ 19% O2</th>
<th>EF2</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO$_x$</td>
<td>4.3</td>
<td>0.0492 lb/MMBtu</td>
<td>Current PTO</td>
</tr>
<tr>
<td>SO$_x$</td>
<td>-</td>
<td>0.19 lb/hr</td>
<td>Current PTO</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>-</td>
<td>0.008 lb/ton</td>
<td>Current PTO</td>
</tr>
<tr>
<td>CO</td>
<td>34.5</td>
<td>0.24 lb/MMBtu</td>
<td>Current PTO</td>
</tr>
<tr>
<td>VOC</td>
<td>-</td>
<td>0.017 lb/MMBtu</td>
<td>Current PTO</td>
</tr>
</tbody>
</table>
C-590-10-3

Aggregate Processing

<table>
<thead>
<tr>
<th>Process</th>
<th>EF2 (lb PM_{10}/ton)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drop point</td>
<td>0 000046</td>
<td>Current PTO</td>
</tr>
<tr>
<td>Drop point</td>
<td>0 000046</td>
<td>Current PTO</td>
</tr>
<tr>
<td>Screen</td>
<td>0 00074</td>
<td>Current PTO</td>
</tr>
<tr>
<td>Cold feed bin #1</td>
<td>0 000046</td>
<td>Current PTO</td>
</tr>
<tr>
<td>Cold feed bin #2</td>
<td>0 000046</td>
<td>Current PTO</td>
</tr>
<tr>
<td>Cold feed bin #3</td>
<td>0 000046</td>
<td>Current PTO</td>
</tr>
<tr>
<td>New Conveyor #1</td>
<td>0 000046</td>
<td>Current PTO</td>
</tr>
<tr>
<td>New Conveyor #2</td>
<td>0 000046</td>
<td>Current PTO</td>
</tr>
<tr>
<td>Total</td>
<td>0 00106</td>
<td>-</td>
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</table>

C-590-18-0

Dry Lime Processing

<table>
<thead>
<tr>
<th>Process</th>
<th>EF2 lb PM_{10}/ton</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pugmill</td>
<td>0 0055 (controlled)</td>
<td>AP-42 Table 11 12-2 (6/06)</td>
</tr>
<tr>
<td>Pugmill Conveyor</td>
<td>0 000046 (controlled)</td>
<td>AP-42 Table 11 19 2-2 (8/04)</td>
</tr>
<tr>
<td>Storage Silo #1</td>
<td>0 0049 (controlled)</td>
<td>AP-42 Table 11 12-2 (6/06)</td>
</tr>
<tr>
<td>Storage Silo #2</td>
<td>0 0049 (controlled)</td>
<td>AP-42 Table 11 12-2 (6/06)</td>
</tr>
</tbody>
</table>

C Calculations

1. Pre-Project Potential to Emit (PE1)

C-590-9-7

\[
PE_{1NOX} = EF \text{ (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times \text{Operational Schedule (hr/day or hr/year)}
\]

\[
PE_{1SOX} = EF \text{ (lb/hr)} \times \text{Operational Schedule (hr/day or hr/year)}
\]

\[
PE_{1PM_{10}} = EF \text{ (lb/ton)} \times \text{Process Rate (ton/day or ton/year)}
\]

Daily Pre-Project Potential to Emit - Dryer

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NO\textsubscript{X}</td>
<td>0 0492 (lb/MMBtu)</td>
<td>\times 1,946,096 (ft\textsuperscript{3}/day)</td>
<td>\times 1000 (Btu/ft\textsuperscript{3})</td>
<td>= 95 7 (lb/day)</td>
</tr>
<tr>
<td>SO\textsubscript{X}</td>
<td>0 19 (lb/hr)</td>
<td>\times 24 (hr/day)</td>
<td></td>
<td>= 4 6 (lb/day)</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>0 008 (lb/ton)</td>
<td>\times 8,000 (ton/day)</td>
<td></td>
<td>= 64 0 (lb/day)</td>
</tr>
<tr>
<td>CO</td>
<td>0 24 (lb/MMBtu)</td>
<td>\times 1,946,096 (ft\textsuperscript{3}/day)</td>
<td>\times 1000 (Btu/ft\textsuperscript{3})</td>
<td>= 467 1 (lb/day)</td>
</tr>
<tr>
<td>VOC</td>
<td>0 017 (lb/MMBtu)</td>
<td>\times 1,946,096 (ft\textsuperscript{3}/day)</td>
<td>\times 1000 (Btu/ft\textsuperscript{3})</td>
<td>= 33 1 (lb/day)</td>
</tr>
</tbody>
</table>
Granite Construction, Coalinga
C-590, #1150587

### Annual Pre-Project Potential to Emit - Dryer

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>EF (lb/MMBtu)</th>
<th>Heat Input (ft³/year)</th>
<th>Process Rate (ton/day)</th>
<th>Daily PE1</th>
<th>Annual PE1</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>0.0492</td>
<td>200,000,000</td>
<td>1,000</td>
<td>9,840</td>
<td></td>
</tr>
<tr>
<td>SOx</td>
<td>0.19</td>
<td></td>
<td></td>
<td>317</td>
<td></td>
</tr>
<tr>
<td>PM₁₀</td>
<td>0.008</td>
<td></td>
<td></td>
<td>6,577</td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>0.24</td>
<td></td>
<td></td>
<td>48,000</td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>0.017</td>
<td></td>
<td></td>
<td>3,400</td>
<td></td>
</tr>
</tbody>
</table>

C-590-10-2

Daily PE1 = EF1 (lb-PM₁₀/ton) x Process Rate (ton/day)
Annual PE1 = Daily PE1 x 365 days/year

### Pre-Project Potential to Emit (PE1)

<table>
<thead>
<tr>
<th>Process</th>
<th>EF (lb-PM₁₀/ton)</th>
<th>Process Rate (ton/day)</th>
<th>Daily PE1</th>
<th>Annual PE1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drop point</td>
<td>0.000046</td>
<td>7,520</td>
<td>0.3</td>
<td>110</td>
</tr>
<tr>
<td>Drop point</td>
<td>0.000046</td>
<td>7,520</td>
<td>0.3</td>
<td>110</td>
</tr>
<tr>
<td>Screen</td>
<td>0.00074</td>
<td>7,520</td>
<td>5.6</td>
<td>2,044</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>6.2</td>
<td>2,264</td>
</tr>
</tbody>
</table>

C-590-18-0

Since this is a new emissions unit, PE1 = 0 for all pollutants

### 2 Post-Project Potential to Emit (PE2)

C-590-9-8

PE₂NOx,SOx,CO,VOC = EF (lb/MMBtu) x Heat Input (MMBtu/hr) x Operational Schedule (hr/day or hr/year)

PE₂PM₁₀ = EF (lb/ton) x Process Rate (ton/day or ton/year)

### Daily Post-Project Potential to Emit - Dryer

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>EF (lb/MMBtu)</th>
<th>Heat Input (ft³/day)</th>
<th>Process Rate (ton/day)</th>
<th>Daily PE1</th>
<th>Annual PE1</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>0.0492</td>
<td>1,946,096</td>
<td>1000</td>
<td>95.7</td>
<td></td>
</tr>
<tr>
<td>SOx</td>
<td>0.19</td>
<td>24</td>
<td></td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>PM₁₀</td>
<td>0.008</td>
<td>8,000</td>
<td></td>
<td>64.0</td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>0.24</td>
<td>1,946,096</td>
<td>1000</td>
<td>467.1</td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>0.017</td>
<td>1,946,096</td>
<td>1000</td>
<td>33.1</td>
<td></td>
</tr>
</tbody>
</table>
### Annual Post-Project Potential to Emit - Dryer

<table>
<thead>
<tr>
<th></th>
<th>NOx</th>
<th>SOx</th>
<th>PM10</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.0492</td>
<td>0.19</td>
<td>0.008</td>
<td>0.24</td>
<td>0.017</td>
</tr>
<tr>
<td>Unit</td>
<td>(lb/MMBtu)</td>
<td>(lb/hr)</td>
<td>(lb/ton)</td>
<td>(lb/MMBtu)</td>
<td>(lb/MMBtu)</td>
</tr>
<tr>
<td></td>
<td>x 200,000,000 (ft³/year)</td>
<td>x 1,481 (hr/year)</td>
<td>x 822,150 (ton/year)</td>
<td>x 200,000,000 (ft³/year)</td>
<td>x 1,000 (Btu/ft³)</td>
</tr>
<tr>
<td></td>
<td>(Btu/ft³)</td>
<td></td>
<td></td>
<td>(Btu/ft³)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value</td>
<td>9,840</td>
<td>281</td>
<td>6,577</td>
<td>48,000</td>
<td>3,400</td>
</tr>
<tr>
<td>Unit</td>
<td>(lb/year)</td>
<td>(lb/year)</td>
<td>(lb/year)</td>
<td>(lb/year)</td>
<td>(lb/year)</td>
</tr>
</tbody>
</table>

**C-590-10-3**

Daily PE2 = EF2 (lb-PM10/ton) x Process Rate (ton/day)
Annual PE2 = Daily PE2 x 365 days/year

### Post-Project Potential to Emit (PE2)

<table>
<thead>
<tr>
<th>Process</th>
<th>EF (lb-PM10/ton)</th>
<th>Process Rate (ton/day)</th>
<th>Daily PE2 (lb-PM10/ton/day)</th>
<th>Annual PE2 (lb-PM10/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drop point</td>
<td>0.000046</td>
<td>7,520</td>
<td>0.3</td>
<td>110</td>
</tr>
<tr>
<td>Drop point</td>
<td>0.000046</td>
<td>7,520</td>
<td>0.3</td>
<td>110</td>
</tr>
<tr>
<td>Screen</td>
<td>0.00074</td>
<td>7,520</td>
<td>5.6</td>
<td>2,044</td>
</tr>
<tr>
<td>Cold feed bin #1</td>
<td>0.000046</td>
<td>4,000</td>
<td>0.2</td>
<td>73</td>
</tr>
<tr>
<td>Cold feed bin #2</td>
<td>0.000046</td>
<td>4,000</td>
<td>0.2</td>
<td>73</td>
</tr>
<tr>
<td>Cold feed bin #3</td>
<td>0.000046</td>
<td>4,000</td>
<td>0.2</td>
<td>73</td>
</tr>
<tr>
<td>Aggregate Conveyor #1</td>
<td>0.000046</td>
<td>6,000</td>
<td>0.3</td>
<td>110</td>
</tr>
<tr>
<td>Aggregate Conveyor #2</td>
<td>0.000046</td>
<td>6,000</td>
<td>0.3</td>
<td>110</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>7.4</td>
<td>2,703</td>
</tr>
</tbody>
</table>

**C-590-18-0**

Daily PE2 = EF2 (lb-PM10/ton) x Process Rate (ton/day)
Annual PE2 = Daily PE2 x 365 days/year

### Post-Project Potential to Emit (PE2)

<table>
<thead>
<tr>
<th>Process</th>
<th>EF (lb-PM10/ton)</th>
<th>Process Rate (ton/day)</th>
<th>Daily PE2 (lb-PM10/ton/day)</th>
<th>Annual PE2 (lb-PM10/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pugmill</td>
<td>0.0055</td>
<td>100</td>
<td>0.6</td>
<td>219</td>
</tr>
<tr>
<td>Pugmill Conveyor</td>
<td>0.0000046</td>
<td>100</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Storage Silo #1</td>
<td>0.0049</td>
<td>100</td>
<td>0.5</td>
<td>183</td>
</tr>
<tr>
<td>Storage Silo #2</td>
<td>0.0049</td>
<td>100</td>
<td>0.5</td>
<td>183</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>1.6</td>
<td>585</td>
</tr>
</tbody>
</table>
3  Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to District Rule 2201, the Pre-Project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

<table>
<thead>
<tr>
<th>Permit Unit</th>
<th>NO\textsubscript{X}</th>
<th>SO\textsubscript{X}</th>
<th>PM\textsubscript{10}</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-590-9-7</td>
<td>9,840</td>
<td>317</td>
<td>6,577</td>
<td>48,000</td>
<td>3,400</td>
</tr>
<tr>
<td>C-590-10-2</td>
<td>0</td>
<td>0</td>
<td>2,264</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C-590-12-0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C-590-14-1</td>
<td>115</td>
<td>30</td>
<td>80</td>
<td>318</td>
<td>100</td>
</tr>
<tr>
<td>C-590-15-1</td>
<td>115</td>
<td>30</td>
<td>80</td>
<td>318</td>
<td>100</td>
</tr>
<tr>
<td>C-590-17-0</td>
<td>0</td>
<td>0</td>
<td>91</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SSPE1</td>
<td>10,070</td>
<td>377</td>
<td>9,092</td>
<td>48,636</td>
<td>3,600</td>
</tr>
</tbody>
</table>

4  Post-Project Stationary Source Potential to Emit (SSPE2)

Pursuant to District Rule 2201, the Post-Project Stationary Source Potential to Emit (SSPE2) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

<table>
<thead>
<tr>
<th>Permit Unit</th>
<th>NO\textsubscript{X}</th>
<th>SO\textsubscript{X}</th>
<th>PM\textsubscript{10}</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-590-9-8</td>
<td>9,840</td>
<td>317</td>
<td>6,577</td>
<td>48,000</td>
<td>3,400</td>
</tr>
<tr>
<td>C-590-10-3</td>
<td>0</td>
<td>0</td>
<td>2,703</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C-590-12-0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C-590-14-1</td>
<td>115</td>
<td>30</td>
<td>80</td>
<td>318</td>
<td>100</td>
</tr>
<tr>
<td>C-590-15-1</td>
<td>115</td>
<td>30</td>
<td>80</td>
<td>318</td>
<td>100</td>
</tr>
<tr>
<td>C-590-17-0</td>
<td>0</td>
<td>0</td>
<td>91</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C-590-18-0</td>
<td>0</td>
<td>0</td>
<td>585</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SSPE2</td>
<td>10,070</td>
<td>377</td>
<td>10,116</td>
<td>48,636</td>
<td>3,600</td>
</tr>
</tbody>
</table>
5. Major Source Determination

Rule 2201 Major Source Determination

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purpose of determining major source status the following shall not be included:

- any ERCs associated with the stationary source
- emissions from non-road IC engines (i.e., IC engines at a particular site at this facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 51 165

<table>
<thead>
<tr>
<th>Rule 2201 Major Source Determination (lb/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
</tr>
<tr>
<td>Pre-Project SSPE (SSPE1) 10,070</td>
</tr>
<tr>
<td>Post Project SSPE (SSPE2) 10,070</td>
</tr>
<tr>
<td>Major Source Threshold 20,000</td>
</tr>
<tr>
<td>Major Source? No</td>
</tr>
</tbody>
</table>

As shown above, the facility is not an existing Major Source, and also is not becoming a Major Source as a result of this project.

Rule 2410 Major Source Determination

The facility evaluated under this project is not listed as one of the categories specified in 40 CFR 52 21(b)(1)(i). Therefore, the following PSD Major Source thresholds are applicable:

<table>
<thead>
<tr>
<th>PSD Major Source Determination (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
</tr>
<tr>
<td>Facility PE before Project Increase 50</td>
</tr>
<tr>
<td>PSD Major Source Thresholds 250</td>
</tr>
<tr>
<td>PSD Major Source? N</td>
</tr>
</tbody>
</table>

As shown above, the facility is not an existing Major Source for PSD for any pollutant. Therefore, the facility is not an existing Major Source for PSD.
6 Baseline Emissions (BE)

The BE calculation (in lbs/year) is performed pollutant-by-pollutant for each unit within the project to calculate the QNEC, and if applicable, to determine the amount of offsets required

Pursuant to District Rule 2201, BE = PE1 for
- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201

As shown in Section VII C 5 above, the facility is not a Major Source for any pollutant

Therefore BE = PE1

7 SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51 165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act"

Since this facility is not a major source for any of the pollutants addressed in this project, this project does not constitute an SB 288 Major Modification

8 Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51 165 and part D of Title I of the CAA

Since this facility is not a Major Source for any pollutants, this project does not constitute a Federal Major Modification. Additionally, since the facility is not a major source for PM$_{10}$ (140,000 lb/year), it is not a major source for PM$_{2.5}$ (200,000 lb/year)
9 Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to pollutants for which the District is in attainment or for unclassified, pollutants. The pollutants addressed in the PSD applicability determination are listed as follows:

- NO$_2$ (as a primary pollutant)
- SO$_2$ (as a primary pollutant)
- CO
- PM
- PM$_{10}$

The first step of this PSD evaluation consists of determining whether the facility is an existing PSD Major Source or not (See Section VII C 5 of this document).

In the case the facility is an existing PSD Major Source, the second step of the PSD evaluation is to determine if the project results in a PSD significant increase.

In the case the facility is NOT an existing PSD Major Source but is an existing source, the second step of the PSD evaluation is to determine if the project, by itself, would be a PSD major source.

In the case the facility is new source, the second step of the PSD evaluation is to determine if this new facility will become a new PSD major Source as a result of the project and if so, to determine which pollutant will result in a PSD significant increase.

1 Potential to Emit for New or Modified Emission Units vs PSD Major Source Thresholds

As a screening tool, the project potential to emit from all new and modified units is compared to the PSD major source threshold, and if total project potential to emit from all new and modified units is below this threshold, no further analysis will be needed.

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52 21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable:

<table>
<thead>
<tr>
<th>PSD Major Source Determination</th>
<th>Potential to Emit (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NO$_2$</td>
</tr>
<tr>
<td>Total PE from New and Modified Units</td>
<td>4.9</td>
</tr>
<tr>
<td>PSD Major Source threshold</td>
<td>250</td>
</tr>
<tr>
<td>New PSD Major Source?</td>
<td>N</td>
</tr>
</tbody>
</table>
As shown in the table above, the project potential to emit, by itself, does not exceed any of the PSD major source thresholds. Therefore Rule 2410 is not applicable and no further discussion is required.

10 Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

\[
\text{QNEC} = \text{PE2} - \text{PE1}, \quad \text{where}
\]

\[
\begin{align*}
\text{QNEC} & = \text{Quarterly Net Emissions Change for each emissions unit, lb/qtr} \\
\text{PE2} & = \text{Post Project Potential to Emit for each emissions unit, lb/qtr} \\
\text{PE1} & = \text{Pre-Project Potential to Emit for each emissions unit, lb/qtr}
\end{align*}
\]

Using the values in Sections VII C 2 and VII C 6 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated as follows:

**C-590-9-8**

<table>
<thead>
<tr>
<th>Quarterly NEC [QNEC]</th>
<th>PE2 (lb/qtr)</th>
<th>PE1 (lb/qtr)</th>
<th>QNEC (lb/qtr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO\textsubscript{X}</td>
<td>2,460</td>
<td>2,460</td>
<td>0</td>
</tr>
<tr>
<td>SO\textsubscript{X}</td>
<td>79</td>
<td>79</td>
<td>0</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>1,644</td>
<td>1,644</td>
<td>0</td>
</tr>
<tr>
<td>CO</td>
<td>12,000</td>
<td>12,000</td>
<td>0</td>
</tr>
<tr>
<td>VOC</td>
<td>850</td>
<td>850</td>
<td>0</td>
</tr>
</tbody>
</table>

**C-590-10-3**

<table>
<thead>
<tr>
<th>Quarterly NEC [QNEC]</th>
<th>PE2 (lb/qtr)</th>
<th>PE1 (lb/qtr)</th>
<th>QNEC (lb/qtr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO\textsubscript{X}</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SO\textsubscript{X}</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>676</td>
<td>566</td>
<td>110</td>
</tr>
<tr>
<td>CO</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VOC</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
C-590-18-0

### Quarterly NEC [QNEC]

<table>
<thead>
<tr>
<th></th>
<th>PE2 (lb/qtr)</th>
<th>PE1 (lb/qtr)</th>
<th>QNEC (lb/qtr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOₓ</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SOₓ</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>146</td>
<td>0</td>
<td>146</td>
</tr>
<tr>
<td>CO</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VOC</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

#### VIII COMPLIANCE

**Rule 2201 New and Modified Stationary Source Review Rule**

**A Best Available Control Technology (BACT)**

**1 BACT Applicability**

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis for the following:

- a) Any new emissions unit with a potential to emit exceeding two pounds per day,
- b) The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
- c) Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
- d) Any new or modified emissions unit, in a stationary source project, which results in a Major Modification

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO

**a New emissions units – PE > 2 lb/day**

As seen in Section VII C 2 above, the applicant is proposing to install a new hot mix asphalt dryer, aggregate conveyors, and dry lime equipment. BACT is triggered if the PE is greater than 2 lb/day. However, BACT is not triggered for CO since the SSPE2 for CO is not greater than 200,000 lb/year, as demonstrated in Section VII C 5 above.
### New Emissions Unit BACT Applicability

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Pollutant</th>
<th>Daily Emissions (lb/day)</th>
<th>BACT Threshold (lb/day)</th>
<th>BACT Triggered?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dryer</td>
<td>NO\textsubscript{X}</td>
<td>957</td>
<td>&gt; 2.0</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>SO\textsubscript{X}</td>
<td>46</td>
<td>&gt; 2.0</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>PM\textsubscript{10}</td>
<td>640</td>
<td>&gt; 2.0</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>CO</td>
<td>467.1</td>
<td>&gt; 2.0</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>VOC</td>
<td>33.1</td>
<td>&gt; 2.0</td>
<td>Yes</td>
</tr>
<tr>
<td>Cold feed bin #1</td>
<td>PM\textsubscript{10}</td>
<td>0.2</td>
<td>&gt; 2.0</td>
<td>No</td>
</tr>
<tr>
<td>Cold feed bin #2</td>
<td>PM\textsubscript{10}</td>
<td>0.2</td>
<td>&gt; 2.0</td>
<td>No</td>
</tr>
<tr>
<td>Cold feed bin #3</td>
<td>PM\textsubscript{10}</td>
<td>0.2</td>
<td>&gt; 2.0</td>
<td>No</td>
</tr>
<tr>
<td>Aggregate Conveyor #1</td>
<td>PM\textsubscript{10}</td>
<td>0.3</td>
<td>&gt; 2.0</td>
<td>No</td>
</tr>
<tr>
<td>Aggregate Conveyor #2</td>
<td>PM\textsubscript{10}</td>
<td>0.3</td>
<td>&gt; 2.0</td>
<td>No</td>
</tr>
<tr>
<td>Pugmill</td>
<td>PM\textsubscript{10}</td>
<td>0.6</td>
<td>&gt; 2.0</td>
<td>No</td>
</tr>
<tr>
<td>Pugmill Conveyor</td>
<td>PM\textsubscript{10}</td>
<td>0.0</td>
<td>&gt; 2.0</td>
<td>No</td>
</tr>
<tr>
<td>Storage Silo #1</td>
<td>PM\textsubscript{10}</td>
<td>0.5</td>
<td>&gt; 2.0</td>
<td>No</td>
</tr>
<tr>
<td>Storage Silo #2</td>
<td>PM\textsubscript{10}</td>
<td>0.5</td>
<td>&gt; 2.0</td>
<td>No</td>
</tr>
</tbody>
</table>

As shown above, BACT will be triggered for the dryer for NO\textsubscript{X}, SO\textsubscript{X}, PM\textsubscript{10}, and VOC.

**b. Relocation of emissions units – PE > 2 lb/day**

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another, therefore BACT is not triggered.

**c. Modification of emissions units – AIPE > 2 lb/day**

As discussed in Section I above, there are no modified emissions units associated with this project. Therefore BACT is not triggered.

**d. SB 288/Federal Major Modification**

As discussed in Sections VII C 7 and VII C 8 above, this project does not constitute an SB 288 and/or Federal Major Modification. Therefore BACT is not triggered for any pollutant.

### 2 BACT Guideline

BACT Guideline 6 3 1, applies to the hot mix asphalt dryer [Asphaltic Concrete – Drum Mix Plant, = or > 2,000 ton/day or = or > 75 6 MMBtu/hr burner] (See Appendix B)
3 Top-Down BACT Analysis

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District's NSR Rule.

Pursuant to the attached Top-Down BACT Analysis (see Appendix B), BACT has been satisfied with the following:

C-590-9-8

- NOx: 0.088 lb/MMBtu Low-NOx burner and either natural gas or LPG as the primary fuel
- SOx: PUC quality natural gas or LPG as a primary fuel
- PM$_{10}$: 99% control efficiency (Rotary drum vents to fabric collector or Venturi scrubber with centrifugal separator) and enclosed drag slat conveyor, hot mix storage silos and truck loadout enclosed on two sides, all vent to blue smoke control comprised of electrostatic precipitator or filter pack, and natural gas or LPG as a primary fuel
- VOC: Enclosed hot mix silos and loadout operation vented to an afterburner

B Offsets

1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table:

<table>
<thead>
<tr>
<th>Offset Determination (lb/year)</th>
<th>NOx</th>
<th>SOx</th>
<th>PM$_{10}$</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSPE2</td>
<td>10,070</td>
<td>377</td>
<td>10,116</td>
<td>48,636</td>
<td>3,600</td>
</tr>
<tr>
<td>Offset Thresholds</td>
<td>20,000</td>
<td>54,750</td>
<td>29,200</td>
<td>200,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Offsets triggered?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

2 Quantity of Offsets Required

As seen above, the SSPE2 is not greater than the offset thresholds for all the pollutants, therefore offset calculations are not necessary and offsets will not be required for this project.
C. Public Notification

1. Applicability

Public noticing is required for
a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
c. Any project which results in the offset thresholds being surpassed, and/or
d. Any project with an SSiPE of greater than 20,000 lb/year for any pollutant
e. Any project which results in a Title V significant permit modification

a. New Major Source, Federal Major Modifications, and SB 288 Major Modifications

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

As demonstrated in Sections VII C 7 and VII C 8, this project does not constitute an SB 288 or Federal Major Modification, therefore, public noticing for SB 288 or Federal Major Modification purposes is not required.

b. PE > 100 lb/day

The PE2 for the dryer is compared to the daily PE Public Notice thresholds in the following table:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PE2 (lb/day)</th>
<th>Public Notice Threshold</th>
<th>Public Notice Triggered?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>95 7</td>
<td>100 lb/day</td>
<td>No</td>
</tr>
<tr>
<td>SOx</td>
<td>46 6</td>
<td>100 lb/day</td>
<td>No</td>
</tr>
<tr>
<td>PM10</td>
<td>64 0</td>
<td>100 lb/day</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>467 1</td>
<td>100 lb/day</td>
<td>Yes</td>
</tr>
<tr>
<td>VOC</td>
<td>33 1</td>
<td>100 lb/day</td>
<td>No</td>
</tr>
</tbody>
</table>

Therefore, public noticing for PE > 100 lb/day purposes is required.

c. Offset Threshold

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.
As detailed above, there were no thresholds surpassed with this project, therefore public noticing is not required for offset purposes.

d **SSIPE > 20,000 lb/year**

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>SSPE1 (lb/year)</th>
<th>SSPE2 (lb/year)</th>
<th>Offset Threshold (lb/year)</th>
<th>Public Notice Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>10,070</td>
<td>10,070</td>
<td>20,000</td>
<td>No</td>
</tr>
<tr>
<td>SOx</td>
<td>377</td>
<td>377</td>
<td>54,750</td>
<td>No</td>
</tr>
<tr>
<td>PM10</td>
<td>9,092</td>
<td>10,116</td>
<td>29,200</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>48,636</td>
<td>48,636</td>
<td>200,000</td>
<td>No</td>
</tr>
<tr>
<td>VOC</td>
<td>3,600</td>
<td>3,600</td>
<td>20,000</td>
<td>No</td>
</tr>
</tbody>
</table>

As demonstrated above, the SSIPEs for all pollutants were less than 20,000 lb/year, therefore public noticing for SSIPE purposes is not required.

e **Title V Significant Permit Modification**

Since this facility does not have a Title V operating, this change is not a Title V Significant Modification, and therefore public noticing is not required.

2. **Public Notice Action**

As discussed above, public noticing is required for this project for CO emissions in excess of 100 lb/day. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATC permit for this equipment.
D Daily Emission Limits (DELs)

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC permit and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

Proposed Rule 2201 (DEL) Conditions

C-590-9-8

- Hot Mix Asphalt (asphaltic concrete) production shall not exceed either of the following limits: 8,000 tons per day or 822,150 tons per year [District Rule 2201]
- Natural gas fuel usage shall not exceed either of the following limits: 1,946,096 cubic feet per day or 200 million cubic feet per year [District Rule 2201]
- Emissions shall not exceed 0.008 lb-PM10/ton of Hot Mix Asphalt [District Rule 2201]
- Emissions from the burner shall not exceed any of the following limits: 0.0492 lb-NOx/MMBtu (or 4.3 ppmv NOx @ 19% O2), 0.24 lb-CO/MMBtu (or 34.5 ppmv CO @ 19% O2), 0.017 lb-VOC/MMBtu, or 0.19 lb-SOx/hr [District Rules 2201 and 4309]

C-590-10-3

- Total feed bin aggregate raw material throughput shall not exceed 7,520 tons per day [District Rule 2201]
- Total aggregate raw material throughput for each aggregate conveyor #1 and #2 shall not exceed 6,000 tons per day [District Rule 2201]
- Total feed bin aggregate raw material throughput for each cold feed bin #1, #2, and #3 shall not exceed 4,000 tons per day [District Rule 2201]
- Emissions shall not exceed 0.00106 lb-PM10 per ton of raw material throughput [District Rule 2201]

C-590-18-0

- The maximum amount of lime received shall not exceed 100 ton/day [District Rule 2201]
- Particulate matter emissions from this operation shall not exceed 1.6 lb-PM10/day [District Rule 2201]
E. Compliance Assurance

1. Source Testing

C-590-9-8

This unit is subject to District Rule 4309, Dryers, Dehydrators, and Ovens. Source testing requirements, in accordance with District Rule 4309 will be discussed in Section VIII, District Rule 4309 of this evaluation.

C-590-10-3 and '18-0

Pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201.

2. Monitoring

C-590-9-8

As required by District Rule 4309, Dryers, Dehydrators, and Ovens, this unit is subject to monitoring requirements. Monitoring requirements, in accordance with District Rule 4309 will be discussed in Section VIII, District Rule 4309 of this evaluation.

C-590-10-3 and '18-0

No monitoring is required to demonstrate compliance with Rule 2201.

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following conditions will be listed on the permit to ensure compliance.

C-590-9-8

- Records of all maintenance of the baghouse, including all change outs of filter media, shall be maintained [District Rule 2201].
- Records of daily and annual natural gas fuel usage, and daily and annual Hot Mix Asphalt (asphaltic concrete) production shall be maintained [District Rules 2201 and 1070].
- All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request [District Rule 1070].
C-590-10-3

- Records of daily feed bin aggregate raw material throughput shall be maintained, retained on the premises for at least five years, and made readily available for District inspection upon request [District Rule 2201]
- All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request [District Rule 1070]

C-590-18-0

- Records of all maintenance of the dust collector, including all change outs of filter media, shall be maintained [District Rules 1070 and 2201]
- Records of daily amount of lime received (in tons) each day shall be maintained [District Rules 1070 and 2201]
- Records of monthly moisture content of lime/aggregate processed in the pugmill shall be maintained [District Rules 1070 and 2201]
- All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request [District Rule 1070]

4 Reporting

No reporting is required to demonstrate compliance with Rule 2201

F. Ambient Air Quality Analysis (AAQA)

An AAQA shall be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. The District’s Technical Services Division conducted the required analysis. Refer to Appendix C of this document for the AAQA summary sheet.

The proposed location is in an attainment area for NO\(_X\), CO, and SO\(_X\). As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for NO\(_X\), CO, or SO\(_X\).

The proposed location is in a non-attainment area for the state’s PM\(_{10}\) as well as federal and state PM\(_{2.5}\) thresholds. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for PM\(_{10}\) and PM\(_{2.5}\).

Therefore, compliance with the requirements of this rule is expected.
Rule 2410  Prevention of Significant Deterioration

The prevention of significant deterioration (PSD) program is a construction permitting program for new major stationary sources and major modifications to existing major stationary sources located in areas classified as attainment or in areas that are unclassifiable for any criteria air pollutant.

As demonstrated above, this project is not subject to the requirements of Rule 2410 due to a significant emission increase and no further discussion is required.

Rule 2520  Federally Mandated Operating Permit

Since this facility’s potential emissions do not exceed any major source thresholds of Rule 2201, this facility is not a major source, and Rule 2520 does not apply.

Rule 4001  New Source Performance Standards

Subpart I—Standards of Performance for Hot Mix Asphalt Facilities

§60 90 Applicability and designation of affected facility

(a) The affected facility to which the provisions of this subpart apply is each hot mix asphalt facility. For the purpose of this subpart, a hot mix asphalt facility is comprised only of any combination of the following: dryers, systems for screening, handling, storing, and weighing hot aggregate, systems for loading, transferring, and storing mineral filler, systems for mixing hot mix asphalt, and the loading, transfer, and storage systems associated with emission control systems.

(b) Any facility under paragraph (a) of this section that commences construction or modification after June 11, 1973, is subject to the requirements of this subpart.

The applicant is proposing to modify (with an increase in emissions) a hot mix asphalt facility. Therefore, the proposed facility is subject to this subpart.

§60 91 Definitions

(a) Hot mix asphalt facility means any facility, as described in §60 90, used to manufacture hot mix asphalt by heating and drying aggregate and mixing with asphalt cements.

§60 92 Standard for particulate matter

(a) On and after the date on which the performance test required to be conducted by §60 8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility any gases which...
(1) Contain particulate matter in excess of 90 mg/dscm (0.04 gr/dscf)

(2) Exhibit 20 percent opacity, or greater

§60.93 Test methods and procedures

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b)

(b) The owner or operator shall determine compliance with the particulate matter standards in §60.92 as follows

(1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf)

(2) Method 9 and the procedures in §60.11 shall be used to determine opacity

District Policy SSP 1005, Visible Emissions From Operations Served By Baghouses and FYI 125, Permit Conditions for Monitoring Differential Pressure for Baghouses, Dust Collectors, and Bin Vent Filters, will be used. The following conditions will ensure compliance with the requirements of Subpart I

- Particulate matter emissions from the baghouse shall not exceed 0.04 grains/dscf in concentration per New Source Performance Standards - 40 CFR 60, Subpart I, (Standards of Performance for Hot Mix Asphalt Facilities) [40 CFR §60.92(a)(1)]
- Source testing to demonstrate compliance with the particulate matter (PM) emissions concentration (gr-PM/dscf) from the exhaust stack of the baghouse and particulate matter (PM10) emission rate per ton of asphalt produced (lb-PM10/ton) shall be conducted within 60 equipment operating days of initial startup. An equipment operating day is any day in which the drum dryer/mixer is operated where material is introduced into the drum dryer/mixer or processed by the drum dryer/mixer, or where fuel is combusted in the drum dryer [40 CFR §60.8(a)]
- Instead of testing for both PM and PM10 emissions, the results of the PM test may be used for compliance with the PM10 emissions limit provided the results include both the filterable and condensable (i.e., back-half) particulates, and that all measured particulate matter is assumed to be PM10. If this option is exercised, source testing shall be conducted using CARB Method 5 or EPA Method 5 (including condensable particulates) [District Rule 1081]
- Source testing to determine the particulate matter concentration from the baghouse shall be conducted using EPA Method 5 [40 CFR §60.93(b)(1)]
- Compliance with opacity limits shall be determined according to EPA Method 9 [40 CFR §60.93(b)(2)]

Therefore, compliance with the requirements of this rule is expected
Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)

This rule incorporates NESHAPs from Part 61, Chapter I, Subchapter C, Title 40, CFR and the NESHAPs from Part 63, Chapter I, Subchapter C, Title 40, CFR, and applies to all sources of hazardous air pollution listed in 40 CFR Part 61 or 40 CFR Part 63. However, no subparts of 40 CFR Part 61 or 40 CFR Part 63 apply to the operation in this project.

Rule 4101 Visible Emissions

Rule 4101 indicates that no air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour, which is dark or darker than Ringelmann 1 or equivalent to 20% opacity. Therefore, the following conditions will be listed on the permit to ensure compliance.

C-590-9-8

- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity [District Rule 4101 and 40 CFR 60.92(a)(2)].

C-590-10-3

- There shall be no visible emissions in excess of 5% opacity for a period or periods aggregating more than three (3) minutes in any one hour [District Rule 4101].

C-590-18-0

- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity [District Rule 4101].
- Visible emissions from the dust collector serving the lime storage silo shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour [District Rules 2201 and 4101].

Rule 4102 Nuisance

Section 40 prohibits discharge of air contaminants, which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of this operation provided the equipment is well maintained. The following condition will be listed on the permit to ensure compliance.

- No air contaminant shall be released into the atmosphere, which causes a public nuisance [District Rule 4102].
California Health & Safety Code 41700 (Health Risk Assessment)

An HRA is not required for a project with a total facility prioritization score of less than one. According to the Technical Services Memo for this project (Appendix C), the total facility prioritization score including this project was greater than one. Therefore, an HRA was required to determine the short-term acute and long-term chronic exposure from this project.

The cancer risk for this project is shown below:

<table>
<thead>
<tr>
<th>Permit Unit</th>
<th>Cancer Risk</th>
<th>T-BACT Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1150587</td>
<td>0.03 per million</td>
<td>No</td>
</tr>
</tbody>
</table>

Discussion of T-BACT

BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. As demonstrated above, T-BACT is not required for this project because the HRA indicates that the risk is not above the District's thresholds for triggering T-BACT requirements, therefore, compliance with the District's Risk Management Policy is expected.

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification not have acute or chronic indices, or a cancer risk greater than the District's significance levels (i.e., acute and/or chronic indices greater than 1 and a cancer risk greater than 10 in a million). As outlined by the HRA Summary in Appendix C of this report, the emissions increases for this project was determined to be less than significant.

Therefore, compliance with the requirements of this rule is expected.

Rule 4201 Particulate Matter Concentration

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot.

C-590-9-8

\[
PM \text{ Conc (gr/scf)} = \frac{(PM \text{ emission rate}) \times (7,000 \text{ gr/lb})}{(\text{Air flow rate})}
\]

\[
PM \text{ Conc (gr/scf)} = \frac{(2.67 \text{ lb-PM}_{10}/\text{hr}) \times (7,000 \text{ gr/lb})}{(57,802 \text{ dscfm}) \times (60 \text{ min/hr})}
\]

\[
PM \text{ Conc (gr/scf)} = 0.005 \text{ gr/scf}
\]
Since the calculated concentration (0.005 gr/scf) is less than the allowed rate (0.1 gr/scf), compliance is expected. The following permit condition will ensure compliance with this rule:

- Particulate matter emissions from the baghouse shall not exceed 0.04 grains/dscf in concentration per New Source Performance Standards - 40 CFR 60, Subpart I, (Standards of Performance for Hot Mix Asphalt Facilities) [40 CFR 60 92(a)(1)]

C-590-10-3

All the PM emitted by the aggregate handling operation is fugitive in nature, therefore this rule is not applicable.

C-590-18-0

\[
PM\text{ Conc (gr/scf)} = \frac{(PM\text{ emission rate}) \times (7,000\text{ gr/lb})}{(Air\text{ flow rate})}
\]

\[
PM\text{ Conc (gr/scf)} = \frac{(0.067\text{ lb-PM}_{10}/hr) \times (7,000\text{ gr/lb})}{(690\text{ dscfm}) \times (60\text{ min/hr})}
\]

PM Conc (gr/scf) = 0.011 gr/scf

Since the calculated concentration is less than the allowed rate, compliance is expected. The following permit condition will ensure compliance with this rule:

- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration [District Rule 4201]

Rule 4202 Particulate Matter – Emission Rate

This rule limits the allowable PM emission rate based on the equipment process weight rate. Section 3.1 defines the process weight as “the total weight of all materials introduced into any specific process, which process may cause any discharge into the atmosphere.”

Per section 4.1, particulate matter (PM) emissions from any source operation shall not exceed the allowable hourly emission rate (E) as calculated using the following applicable formulas:

\[
E = 3.59\ P^{0.62} \quad \text{(when, } P = \text{ process weight rate } \leq 30\text{ tons/hr)}
\]

\[
E = 17.31\ P^{0.16} \quad \text{(when, } P = \text{ process weight rate } > 30\text{ tons/hr)}
\]
C-590-9-8

The post-project process weight rate of the material handling operation is 333.33 tons per hour.

\[
\text{Rule 4202 emission limit} = 17.31 \times P^{0.16} \quad \text{(where P greater than 30 tons/hr)} \\
= 17.31 \times (333.33)^{0.16} \\
= 43.85 \text{ lb/hr}
\]

Assuming 100% of PM is \(\bar{PM}_{10}\), the potential PM emissions rate from each emissions unit is calculated by the following equation:

\[
PE \text{ (lb-PM/hr)} = EF \text{ (lb-PM/hr)} \times \text{Process Rate (ton/hr)} \times \frac{1 \text{ lb-PM}}{1 \text{ lb-PM}_{10}}
\]

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>(\text{EF}_{\text{controlled}}) (lb-PM/ton)</th>
<th>Process Rate (ton/hr)</th>
<th>(\text{E}_{\text{Actual}}) (lb-PM/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dryer</td>
<td>0.008</td>
<td>333.33</td>
<td>2.67</td>
</tr>
</tbody>
</table>

The above table indicates that each emission unit will be compliant with the maximum pound per hour (lb/hr) emissions allowed by this rule.

C-590-10-3

The post-project process weight rate of the material handling operation is 313.33 tons per hour or 250 tons per hour or 166.67 tons per hour.

\[
\text{Rule 4202 emission limit} = 17.31 \times P^{0.16} \quad \text{(where P greater than 30 tons/hr)} \\
= 17.31 \times (313.33)^{0.16} \\
= 43.42 \text{ lb/hr}
\]

\[
\text{Rule 4202 emission limit} = 17.31 \times P^{0.16} \quad \text{(where P greater than 30 tons/hr)} \\
= 17.31 \times (250)^{0.16} \\
= 41.88 \text{ lb/hr}
\]

\[
\text{Rule 4202 emission limit} = 17.31 \times P^{0.16} \quad \text{(where P greater than 30 tons/hr)} \\
= 17.31 \times (166.67)^{0.16} \\
= 39.25 \text{ lb/hr}
\]

Assuming 100% of PM is \(\bar{PM}_{10}\), the potential PM emissions rate from each emissions unit is calculated by the following equation:

\[
PE \text{ (lb-PM/hr)} = EF \text{ (lb-PM/hr)} \times \text{Process Rate (ton/hr)} \times \frac{1 \text{ lb-PM}}{1 \text{ lb-PM}_{10}}
\]
The above table indicates that each emission unit will be compliant with the maximum pound per hour (lb/hr) emissions allowed by this rule.

**C-590-18-0**

The post-project process weight rate of the material handling operation is 4.17 tons per hour.

Rule 4202 emission limit = $3.59 \times P^{0.62}$ (where $P$ less than or equal to 30 tons/hr)

$$= 3.59 \times (4.17)^{0.62}$$

$$= 8.70 \text{ lb/hr}$$

Assuming 100% of PM is PM$_{10}$. The potential PM emissions rate from each emissions unit is calculated by the following equation:

$$PE \text{ (lb-PM/hr)} = EF \text{ (lb-PM/hr)} \times \text{Process Rate (ton/hr)} \times 1 \text{ lb-PM/1 lb-PM}_{10}$$

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>$EF_{\text{Controlled}}$ (lb-PM$_{10}$/ton)</th>
<th>Process Rate (ton/hr)</th>
<th>$E_{\text{Actual}}$ (lb-PM/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pugmill</td>
<td>0.0055</td>
<td>4.17</td>
<td>0.02</td>
</tr>
<tr>
<td>Pugmill Conveyor</td>
<td>0.000046</td>
<td>4.17</td>
<td>0.00</td>
</tr>
<tr>
<td>Storage Silo #1</td>
<td>0.0049</td>
<td>4.17</td>
<td>0.02</td>
</tr>
<tr>
<td>Storage Silo #2</td>
<td>0.0049</td>
<td>4.17</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>0.06</td>
</tr>
</tbody>
</table>

The above table indicates that each emission unit will be compliant with the maximum pound per hour (lb/hr) emissions allowed by this rule.

Therefore, compliance with the requirements of this rule is expected.
Rule 4301 Fuel Burning Equipment

This rule specifies maximum emission rates in lb/hr for SO₂, NO₂, and combustion contaminants (defined as total PM in Rule 1020). This rule also limits combustion contaminants to ≤ 0.1 gr/scf. According to AP 42 (Table 1-4-2, footnote c), all PM emissions from natural gas combustion are less than 1 μm in diameter. As shown below, each unit's maximum hourly emission rates are below the Rule 4301 limits.

<table>
<thead>
<tr>
<th>District Rule 4301 Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit Unit</td>
</tr>
<tr>
<td>C-590-9-8</td>
</tr>
<tr>
<td>Rule 4301 Limit</td>
</tr>
</tbody>
</table>

The more restrictive NSPS Subpart I standard of 0.04 gr/scf will ensure compliance with the requirement of this rule.

Rule 4309 Dryers, Dehydrators, and Ovens

The purpose of this rule is to limit emissions of oxides of nitrogen (NOₓ) and carbon monoxide (CO) from dryers, dehydrators, and ovens. This rule applies to any dryer, dehydrator, or oven that is fired on gaseous fuel, liquid fuel, or is fired on gaseous and liquid fuel sequentially, and the total rated heat input for the unit is 5.0 million British thermal units per hour (5.0 MMBtu/hr) or greater.

Since the aggregate dryer being modified in this project has a heat input rating greater than 5.0 MMBtu, this dryer is subject to the requirements of this rule.

Section 5.0 states that all ppmv limits specified in this section are referenced at dry stack gas conditions and 19% oxygen by volume.

Section 5.1 requires dehydrators to be fired exclusively on PUC quality natural gas except during a PUC natural gas curtailment. The proposed unit is a dryer rather than a dehydrator, so this section does not apply.

Section 5.2 requires NOₓ and CO emissions not to exceed the limits specified in the table below.

<table>
<thead>
<tr>
<th>NOₓ and CO Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Description</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Asphalt/Concrete Plants</td>
</tr>
</tbody>
</table>
All ppmv emission limits specified in this section are referenced at dry stack gas conditions and 19% oxygen by volume. Emission concentrations shall be corrected to 19 percent oxygen in accordance with Section 5.0.

For the drum dryer:
- the proposed NO\textsubscript{x} emission factor is 4.3 ppmvd @ 19% O\textsubscript{2} (0.0492 lb/MBtu), and
- the proposed CO emission factor is 34.5 ppmvd @ 19% O\textsubscript{2} (0.24 lb/MMBtu)

The emissions limits will be listed on the permit as shown in the DEL section above.

Section 5.3 provides for a limited exemption from the emission limitations of Section 5.2 during well defined and permitted startup and shut down operations. The applicant has not proposed any special startup or shutdown considerations, so this section is not relevant to the application.

**Section 5.4 (Emissions) Monitoring Requirements**

Section 5.4.1 states that except for dehydrators, the operator of any unit subject to the applicable emission limits in Sections 4.3.2, or 5.2 shall monitor emissions using one of the techniques specified in Sections 5.4.1.1 or 5.4.1.2.

Section 5.4.1.1 outlines the requirements for the installation and maintenance of an APCO-approved CEMS for NO\textsubscript{x} emissions.

As an alternative to CEMS, Section 5.4.1.2 outlines the requirements for the installation and maintenance of an alternate emissions monitoring in Sections 5.4.1.2.1 through 5.4.1.2.3 of this rule.

Section 5.4.1.2.1 states that the APCO shall not approve an alternative monitoring system unless it is documented that continued operation within ranges of specified emissions-related performance indicators or operational characteristics provides a reasonable assurance of compliance with applicable emission limits.

Section 5.4.1.2.2 states that the approved alternate emission monitoring system shall monitor operational characteristics necessary to assure compliance with the emission limit. Operational characteristics shall be one or more of the following:

- Periodic NO\textsubscript{x} exhaust emission concentrations,
- Periodic exhaust oxygen concentration,
- Flow rate of reducing agent added to exhaust,
- Catalyst inlet and exhaust temperature,
- Catalyst inlet and exhaust oxygen concentration,
- Periodic flue gas recirculation rate,
- Other surrogate operating parameter(s) that demonstrate compliance with the emission limit.

32
In order to satisfy the requirements of District Rule 4309, the applicant has proposed to use pre-approved alternate monitoring scheme A (pursuant to District Policy SSP-3005), which requires that monitoring of NO\textsubscript{x}, CO, and O\textsubscript{2} exhaust concentrations shall be conducted at least once per month (in which a source test is not performed) using a portable analyzer. The following conditions will be incorporated into the permit in order to ensure compliance with the requirements of the proposed alternate monitoring plan:

- The operator shall monitor and record the stack concentration of NO\textsubscript{x}, CO, and O\textsubscript{2} at least once every month in which asphalt is produced on at least five days or for at least 32 hours, whichever comes first and in which a source test is not performed, using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e., the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 production days of restarting the unit unless monitoring has been performed within the last month [District Rule 4309].
- If either the NO\textsubscript{x} or CO concentrations corrected to 19% O\textsubscript{2}, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition [District Rule 4309].
- The permittee shall maintain records of (1) the date and time of NO\textsubscript{x}, CO, and O\textsubscript{2} measurements, (2) the O\textsubscript{2} concentration in percent and the measured NO\textsubscript{x} and CO concentrations corrected to 19% O\textsubscript{2}, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309].

Section 5.5.1 states that all emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the PTO.

Section 5.5.2 states that except for as provided in Section 5.5.3, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0.

The following condition will be listed on the permit to ensure compliance with Sections 5.5.1 and 5.5.2.
• All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309 [District Rule 4309]

Section 5.5.5 states that for emissions monitoring pursuant to Section 5.4.1.2.2.1, emission readings shall be averaged over a 15-consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15-consecutive minute period.

The following condition will be listed on the permit to ensure compliance with this section:

• All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15-consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15-consecutive-minute period [District Rule 4309]

Section 5.5.6 states that for emissions source testing performed pursuant to Section 6.3.1 to determine compliance with an applicable emission limit of this rule, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two of the three runs individually demonstrate emissions above the applicable limit, the test cannot be used to demonstrate compliance for the unit, even if the averaged emissions of all three test runs is less than the applicable limit. The following condition will be listed on the permit to ensure compliance with this section:

• For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit [District Rule 4309]

Section 6.2 specifies the acceptable test methods for monitoring or compliance determinations. The following conditions will be listed on the permit to ensure compliance:

• NO\textsubscript{x} emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis [District Rule 4309]
• CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100 [District Rule 4309]
• Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100 [District Rule 4309]
Section 6 3 2 states that each unit subject to the requirements in Sections 4 3, or 5 2 shall be initially source tested to determine compliance with the applicable emission limits not later than the applicable full compliance schedule specified in Section 7 0. Thereafter, each unit subject to Section 5 2 emission limits shall be source tested at least once every 24 months. Units subject to Section 5 2 and operating less than 50 days per calendar year shall follow the source test frequency prescribed in Section 6 3 3. Therefore, the following condition will be listed on the permit to ensure compliance with this section:

- Source testing to measure NOx and CO emissions from this unit shall be conducted within 60 equipment operating days of initial startup and at least once every 24 months thereafter. An equipment operating day is any day in which the drum dryer/mixer is operated where material is introduced into the drum dryer/mixer or processed by the drum dryer/mixer, or where fuel is combusted in the drum dryer [District Rules 2201 and 4309].

Section 6 3 5 states that the APCO shall be notified according to the provisions of Rule 1081 (Source Sampling). The following conditions will be listed on the permit to ensure compliance with this section:

- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing [District Rule 1081].
- The results of each source test shall be submitted to the District within 60 days thereafter [District Rule 1081].

Section 6 3 6 states that emissions source testing shall be conducted with the unit operating either at conditions representative of normal operations or conditions specified in the PTO. The requirements of this section will be satisfied by the condition listed in Sections 5 5 1 and 5 5 2 of this rule evaluation.

Section 6 3 7 states that all test results for NOx and CO shall be reported in ppmv, corrected to dry stack conditions and adjusted using the oxygen correction factor. The following condition will be listed on the permit to ensure compliance with this section:

- All test results for NOx and CO shall be reported in ppmv @ 19% O2 (or no correction if measured above 19% O2), corrected to dry stack conditions [District Rule 4309].

Section 6 3 8 states that for the purpose of determining compliance with an applicable emission limit, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply.

Section 6 3 9 states that if two of the three runs specified by Section 6 3 8 individually demonstrate emissions above the applicable limit, the test cannot be used to demonstrate compliance for the unit, even if the averaged emissions of all three runs is less than the applicable limit.
The requirements of Sections 6.3.8 and 6.3.9 will be satisfied by the condition listed in Section 5.5.6 of this rule evaluation.

Section 6.4 states that in addition to the provisions of Section 6.3, asphalt/concrete plants shall choose one of the following options for source testing:

- Test the unit using locally mined aggregate in the dryer. If the source test using locally mined aggregate fails, the operator may re-run the source test using aggregate from a different source.
- Test the unit using aggregate from a source different from the source used during normal operations.
- Test the unit using a heat-absorbing material in the dryer, but no aggregate.
- Test the unit with no material in the dryer.

The following condition will be listed on the permit to ensure compliance with the source testing requirements of this section:

- Source testing to measure NOx and CO emissions from the asphaltic concrete batch plant shall be conducted utilizing one of the following options: (a) Test the unit using locally mined aggregate in the dryer. If the source test using locally mined aggregate fails, the operator may re-run the source test using aggregate from a different source, (b) Test the unit using aggregate from a source different from the source used during normal operations, (c) Test the unit using a heat-absorbing material in the dryer, but no aggregate, (d) Test the unit with no material in the dryer [District Rule 4309].

Section 7.0 Compliance Schedule

The compliance schedules given in this section relate to units in existence at the time the rule was adopted. This section is not pertinent to the present application.

Therefore, compliance with the requirements of this rule is expected.

Rule 4641 Cutback, Slow Cure, Emulsified Asphalt, Paving and Maintenance Operations

The purpose of this rule is to limit VOC emissions by restricting the application and manufacturing of certain types of asphalt for paving and maintenance operations.

This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.

Section 4.0 Exemptions

4.1 The requirements of Section 5.0 shall not apply to the manufacture of cutback asphalt or emulsified asphalt in the manufacturing of paving materials where such materials are for shipment and use outside of the District.
4.2 The requirements of Section 5.1.2 shall not apply to the use of medium cure asphalt where the National Weather Service official forecast of the high temperature for the 24 hour period following application is below 50°F

Section 5.0 Requirements

Section 5.1 A person shall not manufacture for sale nor use any of the following for penetrating prime coat, tack coat, dust palliative, or other paving and maintenance operations:

5.1.1 Rapid cure cutback asphalt,
5.1.2 Medium cure cutback asphalt,
5.1.3 Slow cure asphalt which as produced for application, contains more than one-half (0.5) percent of organic compounds which evaporate at 500°F or lower,
5.1.4 Emulsified asphalt containing organic compounds, in excess of three (3) percent by volume, which evaporate at 500°F or lower.

- The operator shall not manufacture for sale nor use within the District any of the following for penetrating prime coat, tack coat, dust palliative, or other paving and maintenance operations: (1) rapid cure cutback asphalt, (2) medium cure cutback asphalt (unless the National Weather Service official forecast of the high temperature for the 24 hour period following application is below 50°F), (3) slow cure asphalt which as produced for application, contains more than one-half (0.5) percent of organic compounds which evaporate at 500 degrees Fahrenheit or lower, (4) emulsified asphalt containing organic compounds, in excess of three (3) percent by volume, which evaporate at 500 degrees Fahrenheit or lower [District Rule 4641]
- The manufacturer of cutback and slow cure asphalt shall maintain records showing the types and amounts of cutback asphalt and slow cure asphalt which contain organic compounds produced and the destination of these products. Such records shall be maintained daily and retained and available for inspection by District personnel for a period of 5 years [District Rule 4641]

Rule 4801 Sulfur Compounds

A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge 0.2% by volume calculated as SO₂, on a dry basis averaged over 15 consecutive minutes.

Using the ideal gas equation and the SOx emission factor for the drum dryer, the sulfur compound emissions are calculated as follows:

\[
\text{Volume SO}_2 = \frac{n \cdot RT}{P}
\]
With

\[ n = \text{moles SO}_2 \]
\[ T \text{ (Standard Temperature)} = 60^\circ \text{F} = 520^\circ \text{R} \]
\[ P \text{ (Standard Pressure)} = 14.7 \text{ psi} \]
\[ R \text{ (Universal Gas Constant)} = \frac{10.73 \text{ psi ft}^3}{\text{lb mol} \ ^\circ \text{R}} \]

\[
\frac{0.19 \text{ lb SO}_x \times hr}{135 \text{ MMBtu}} \times \frac{hr}{8,710 \text{ dscf}} \times \frac{1 \text{ lb mol}}{64 \text{ lb}} \times \frac{10.73 \text{ psi} \ ft^3}{\text{lb mol} \ ^\circ \text{R}} \times \frac{520^\circ \text{R}}{14.7 \text{ psi}}
\]

= 1.0 ft³ SO₂/10⁶ ft³ exhaust

1.0 ft³ SO₂/10⁶ ft³ exhaust = 1.0 ppmv (at 0% excess air)

Since 1.0 ppmv is less than 2,000 ppmv allowed by this rule, compliance with District Rule 4801 requirements is expected. Compliance with the NSR-based limit will ensure compliance with Rule 4801.

**California Health & Safety Code 42301 6 (School Notice)**

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301 6, a school notice is not required.

**California Environmental Quality Act (CEQA)**

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities,
- Identify the ways that environmental damage can be avoided or significantly reduced,
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible, and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.
Greenhouse Gas (GHG) Significance Determination

It is determined that no other agency has prepared or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project.

On December 17, 2009, the District’s Governing Board adopted a policy, APR 2005, Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency, for addressing GHG emission impacts when the District is Lead Agency under CEQA and approved the District’s guidance document for use by other agencies when addressing GHG impacts as lead agencies under CEQA. Under this policy, the District’s determination of significance of project-specific GHG emissions is founded on the principal that projects with GHG emission reductions consistent with AB 32 emission reduction targets are considered to have a less than significant impact on global climate change. Consistent with District Policy 2005, projects complying with an approved GHG emission reduction plan or GHG mitigation program, which avoids or substantially reduces GHG emissions within the geographic area in which the project is located, would be determined to have a less than significant individual and cumulative impact for GHG emission.

The California Air Resources Board (ARB) adopted a Cap-and-Trade regulation as part one of the strategies identified for AB32. This Cap-and-Trade regulation is a statewide plan, supported by a CEQA compliant environmental review document, aimed at reducing or mitigating GHG emissions from targeted industries. Facilities subject to the Cap-and-Trade regulation are subject to an industry-wide cap on overall GHG emissions. Any growth in emissions must be accounted for under that cap such that a corresponding and equivalent reduction in emissions must occur to allow any increase. Further, the cap decreases over time, resulting in an overall decrease in GHG emissions.

Under District policy APR 2025, CEQA Determinations of Significance for Projects Subject to ARB’s GHG Cap-and-Trade Regulation, the District finds that the Cap-and-Trade is a regulation plan approved by ARB, consistent with AB32 emission reduction targets, and supported by a CEQA compliant environmental review document. As such, consistent with District Policy 2005, projects complying project complying with Cap-and-Trade requirements are determined to have a less than significant individual and cumulative impact for GHG emissions.

The GHG emissions increases associated with this project result from the combustion of fossil fuel(s), other than jet fuel, delivered from suppliers subject to the Cap-and-Trade regulation. Therefore, as discussed above, consistent with District Policies APR 2005 and APR 2025, the District concludes that the GHG emissions increases associated with this project would have a less than significant individual and cumulative impact on global climate change.
District CEQA Findings

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15301 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

IX RECOMMENDATION

Compliance with all applicable rules and regulations is expected. Issue Authority to Construct permits C-590-9-8, '10-3, '18-0 subject to the permit conditions listed on the attached draft Authority to Construct permits in Appendix D.

X BILLING INFORMATION

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Fee Schedule</th>
<th>Fee Description</th>
<th>Annual Fee</th>
</tr>
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<tbody>
<tr>
<td>C-590-9-8</td>
<td>3020-02-H</td>
<td>135 MMBtu/hr</td>
<td>$1,030</td>
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<tr>
<td>C-590-10-3</td>
<td>3020-01-D</td>
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<td>$314</td>
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<td>C-590-18-0</td>
<td>3020-01-F</td>
<td>480 hp</td>
<td>$607</td>
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</tbody>
</table>

APPENDICES

A Current Permits
B BACT Guideline 6 3 1 and Top Down BACT Analysis
C Health Risk Assessment and Ambient Air Quality Analysis
D Draft Authority to Construct Permits
APPENDIX A

Current Permits
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT C-590-9-7

EXPIRATION DATE 05/31/2018

EQUIPMENT DESCRIPTION
ASPHALTIC CONCRETE BATCH PLANT WITH 120 MMBTU/HR NORTH AMERICAN LOW NOX BURNER SERVED BY BMG MODEL BH4505-S PULSE JET BAGHOUSE, A WARM ASPHALT MIX SYSTEM, A LIQUID ANTI-STRIP METERING SYSTEM AND TWO EXEMPT 30 Kgal ASPHALT OIL STORAGE TANKS WITH 2.1 MMBTU/HR NATURAL GAS FIRED HEAT TRANSFER SYSTEM AND DEMISTER SYSTEM

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance [District Rule 4102].
2. All equipment shall be maintained and operated according to the specifications and plans contained in the permit application except as otherwise specified herein [District Rule 2201].
3. There shall be no visible emissions in excess of 5% opacity for a period or periods aggregating more than three (3) minutes in any one hour [District Rule 2201].
4. The baghouse shall be equipped with a pressure differential gauge to indicate a pressure drop ranging from 1" to 5" water column across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location [District Rule 2201].
5. The Hot Mix Asphalt drum mixer burner must have an individual fuel flow metering device installed in the natural gas fuel supply line [District Rule 2201].
6. Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere [District Rule 2201].
7. Hot Mix Asphalt (asphaltic concrete) production shall not exceed either of the following limits: 8,000 tons per day or 822,150 tons per year [District Rule 2201].
8. The Hot Mix Asphalt drum mixer burner shall be fired on natural gas fuel only [District Rule 2201].
9. Natural gas fuel usage shall not exceed either of the following limits: 1,946,996 cubic feet per day or 200 million cubic feet per year [District Rule 2201].
10. Particulate matter (PM10) emissions from the baghouse shall not exceed 0.04 grains/dscf in concentration per New Source Performance Standards - 40 CFR 60, Subpart I, (Standards of Performance for Hot Mix Asphalt Facilities) [District Rule 4001].
11. Emissions shall not exceed 0.008 lb-PM10/ton of Hot Mix Asphalt [District Rule 2201].
12. Emissions from the burner shall not exceed any of the following limits: 0.0492 lb-NOx/MMBtu (or 4.3 ppmv NOx @ 19% O2), 0.24 lb-CO/MMBtu (or 34.5 ppmv CO @ 19% O2), 0.017 lb-VOC/MMBtu, or 0.09 lb S0x/hr [District Rule 2201 & District Rule 4309].
13. Source testing to measure NOx and CO emissions from this unit shall be conducted at least once every twenty-four (24) months [District Rule 4309].
14. The following test methods shall be used: NOx - EPA Method 7E, CO - EPA Method 10, stack gas oxygen - EPA Method 3 or 3A, stack gas velocities - EPA Method 2, & stack gas moisture content - EPA Method 4 [District Rule 4309].

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.
15 The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing [District Rule 1081].

16 The results of each source test shall be submitted to the District within 60 days thereafter [District Rule 1081].

17 The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month in which asphalt is produced on at least five days or for at least 32 hours, whichever comes first (and in which a source test is not performed), using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e., the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 production days of restarting the unit unless monitoring has been performed within the last month [District Rule 4309].

18 If either the NOx or CO concentrations corrected to 19% O2 (or no correction if measured above 19% O2), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition [District Rule 4309].

19 All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer’s specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period [District Rule 4309].

20 The permittee shall maintain records of (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 19% O2 (or no correction if measured above 19% O2), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309].

21 Records of daily and annual natural gas fuel usage, and daily and annual Hot Mix Asphalt (asphaltic concrete) production shall be maintained, retained on the premises for at least five years and made available for District inspection upon request [District Rules 2201 & 1070].

22 This permit does not authorize the violation of any conditions established for this facility in the Conditional Use Permit (CUP), Special Use Permit (SUP), Site Approval, Site Plan Review (SPR), or other approval documents issued by a local, state, or federal agency [Public Resources Code 21000-21177 California Environmental Quality Act].
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT C-590-10-2

EXPIRATION DATE 05/31/2018

EQUIPMENT DESCRIPTION
AGGREGATE HANDLING OPERATION CONSISTING OF SEVEN COLD AGGREGATE FEED BINS WITH SEVEN BELT FEEDERS, ASSOCIATED BELT CONVEYORS, WATER SPRAY BARS, PARALLEL CONVEYOR BELT, AND TWO VIBRATING SCREENS PROVIDING RAW MATERIAL FOR A HOT MIX (C-0590-9) AND RECLAIMED ASPHALT PAVEMENT OPERATION

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere [District Rule 2201]

2. Moisture content of the material being processed, after application of wet suppression control, shall be at least 1.5% by weight or greater [District Rule 2201]

3. All haul roads and other roadways traversed by mobile equipment and/or motor vehicles shall be adequately moistened with water at such a frequency as required to prevent visible emissions equal to or in excess of 20% opacity from such roads [District Rule 2201]

4. All stockpiled sand, aggregate, and other materials shall be maintained adequately moist to minimize emissions of fugitive particulate matter [District Rule 2201]

5. All fugitive emission points shall be controlled using water spray system to minimize particulate matter emissions [District Rule 2201]

6. Total feed bin aggregate raw material throughput including Reclaimed Asphalt Pavement shall not exceed 7,520 tons per day [District Rule 2201]

7. There shall be no visible emissions in excess of 5% opacity for a period or periods aggregating more than three (3) minutes in any one hour [District Rule 4101]

8. Emissions shall not exceed 0.00094 lb PM10 per ton of raw material throughput [District Rule 2201]

9. Records of daily feed bin aggregate raw material throughput shall be maintained, retained on the premises for at least five years, and made readily available for District inspection upon request [District Rule 2201]
APPENDIX B

BACT Guideline 6.3.1 and Top Down BACT Analysis
## San Joaquin Valley Unified Air Pollution Control District

**Best Available Control Technology (BACT) Guideline 6 3 1**  
Last Update 5/21/2001

### Asphaltic Concrete - Drum Mix Plant, ≥ 2,000 ton/day or ≥ 75.6 MMBtu/hr burner

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Achieved in Practice or contained in the SIP</th>
<th>Technologically Feasible</th>
<th>Alternate Basic Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>Natural gas or LPG as a primary fuel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOx</td>
<td>0.088 lb/MMBtu Low-NOx burner and either natural gas or LPG as the primary fuel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM10</td>
<td>99% control efficiency (Rotary drum vents to fabric collector or Venturi scrubber with centrifugal separator) and enclosed conveyors, hot mix storage silos enclosed all vent to oil mist collectors, and natural gas or LPG as a primary fuel</td>
<td>99% control efficiency (Rotary drum vents to fabric collector or Venturi scrubber with centrifugal separator) and enclosed drag slat conveyor, hot mix storage silos and truck loadout enclosed on two sides, all vent to blue smoke control comprised of electrostatic precipitator or filter pack, and natural gas or LPG as a primary fuel</td>
<td>99% control efficiency (Rotary drum vents to fabric collector or Venturi scrubber with centrifugal separator) and enclosed conveyors, hot mix storage silos and truck loadout enclosed on two sides, all vent to blue smoke control comprised of electrostatic precipitator or filter pack, and natural gas or LPG as a primary fuel</td>
</tr>
<tr>
<td>SOx</td>
<td>PUC quality natural gas or LPG as a primary fuel</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| VOC       | Natural gas or LPG as a primary fuel, and enclosed hot mix silos and loadout operation vented to the rotary-dryer burner | Enclosed hot mix silos and loadout operation vented to an afterburner | 6 3 1

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

*This is a Summary Page for this Class of Source*
Top-Down BACT Analysis for Permit Unit C-590-9-8

BACT is triggered for NOx, SOx, PM$_{10}$, and VOC

Top-Down BACT Analysis for NOx Emissions

Step 1 – Identify all control technologies

SJVUAPCD BACT Clearinghouse, Guideline 6 3 1, Asphaltic Concrete – Drum Mix Plant, = or > 2,000 ton/day or = or > 75 6 MMBtu/hr burner, 1st quarter 2015, identifies BACT for NOx emissions as follows

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Achieved in Practice or contained in SIP</th>
<th>Technologically Feasible</th>
<th>Alternate Basic Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>0.088 lb/MMBtu Low-NOx burner and either natural gas or LPG as the primary fuel</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Step 2 - Eliminate Technologically Infeasible Options

None of the above listed options are technologically infeasible

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

<table>
<thead>
<tr>
<th>Rank</th>
<th>Control Technology</th>
<th>Achieved in Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.088 lb/MMBtu Low-NOx burner and either natural gas or LPG as the primary fuel</td>
<td>Y</td>
</tr>
</tbody>
</table>

There are no remaining control technologies for NOx

Step 4 - Cost Effectiveness Analysis

The applicant is proposing the most effective control technology for NOx, therefore, a cost effectiveness analysis is not required
Step 5 - Select BACT

Pursuant to the above Top-Down BACT Analysis, BACT for the hot mix asphalt dryer must be satisfied with the following:

NOx 0.088 lb/MBtu Low-NOx burner and either natural gas or LPG as the primary fuel  
(Achieved in Practice)

The applicant has proposed a low NOx burner with an emission factor of 0.0492 lb/MBtu and natural gas as the primary fuel. Therefore, the requirements of BACT are satisfied.
Top-Down BACT Analysis for SO$_x$ Emissions

Step 1 – Identify all control technologies

SJVUAPCD BACT Clearinghouse, Guideline 6 3 1, Asphaltic Concrete – Drum Mix Plant, = or > 2,000 ton/day or = or > 75 6 MMBtu/hr burner, 1st quarter 2015, identifies BACT for SO$_x$ emissions as follows

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Achieved in Practice or contained in SIP</th>
<th>Technologically Feasible</th>
<th>Alternate Basic Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO$_x$</td>
<td>PUC quality natural gas or LPG as a primary fuel</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Step 2 - Eliminate Technologically Infeasible Options

None of the above listed options are technologically infeasible

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

<table>
<thead>
<tr>
<th>Rank</th>
<th>Control Technology</th>
<th>Achieved in Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PUC quality natural gas or LPG as a primary fuel</td>
<td>Y</td>
</tr>
</tbody>
</table>

There are no remaining control technologies for SO$_x$

Step 4 - Cost Effectiveness Analysis

The applicant is proposing the most effective control technology for SO$_x$, therefore, a cost effectiveness analysis is not required
Step 5 - Select BACT

Pursuant to the above Top-Down BACT Analysis, BACT for the hot mix asphalt dryer must be satisfied with the following:

SOx  PUC quality natural gas or LPG as a primary fuel (Achieved in Practice)

The applicant has proposed PUC quality natural gas as a primary fuel. Therefore, the requirements of BACT are satisfied.
Top-Down BACT Analysis for PM$_{10}$ Emissions

Step 1 – Identify all control technologies

SJVUAPCD BACT Clearinghouse, Guideline 6 3 1, Asphalitic Concrete – Drum Mix Plant, = or > 2,000 ton/day or = or > 75 6 MMBtu/hr burner, 1st quarter 2015, identifies BACT for PM$_{10}$ emissions as follows

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Achieved in Practice or contained in SIP</th>
<th>Technologically Feasible</th>
<th>Alternate Basic Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM10</td>
<td>99% control efficiency (Rotary drum vents to fabric collector or Venturi scrubber with centrifugal separator) and enclosed conveyors, hot mix storage silos enclosed all vent to oil mist collectors, and natural gas or LPG as a primary fuel</td>
<td>99% control efficiency (Rotary drum vents to fabric collector or Venturi scrubber with centrifugal separator) and enclosed drag slat conveyor, hot mix storage silos and truck loadout enclosed on two sides, all vent to blue smoke control comprised of electrostatic precipitator or filter pack, and natural gas or LPG as a primary fuel</td>
<td></td>
</tr>
</tbody>
</table>

Step 2 - Eliminate Technologically Infeasible Options

None of the above listed options are technologically infeasible

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

<table>
<thead>
<tr>
<th>Rank</th>
<th>Control Technology</th>
<th>Achieved in Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>99% control efficiency (Rotary drum vents to fabric collector or Venturi scrubber with centrifugal separator) and enclosed drag slat conveyor, hot mix storage silos and truck loadout enclosed on two sides, all vent to blue smoke control comprised of electrostatic precipitator or filter pack, and natural gas or LPG as a primary fuel</td>
<td>N</td>
</tr>
<tr>
<td>2</td>
<td>99% control efficiency (Rotary drum vents to fabric collector or Venturi scrubber with centrifugal separator) and enclosed conveyors, hot mix storage silos enclosed all vent to oil mist collectors, and natural gas or LPG as a primary fuel</td>
<td>Y</td>
</tr>
</tbody>
</table>

There are no remaining control technologies for PM$_{10}$
**Step 4 - Cost Effectiveness Analysis**

The applicant is proposing the most effective control technology for PM$_{10}$, therefore, a cost effectiveness analysis is not required.

**Step 5 - Select BACT**

Pursuant to the above Top-Down BACT Analysis, BACT for the hot mix asphalt dryer must be satisfied with the following:

- PM$_{10}$ 99% control efficiency (Rotary drum vents to fabric collector or Venturi scrubber with centrifugal separator) and enclosed drag slat conveyor, hot mix storage silos and truck loadout enclosed on two sides, all vent to blue smoke control comprised of electrostatic precipitator or filter pack, and natural gas or LPG as a primary fuel (Technologically Feasible).

The applicant has proposed a rotary drum venting to a fabric collector with a 99% control efficiency and natural gas as a primary fuel. Only the dryer triggers BACT in this project. The BACT requirements for the other emission units are not applicable. Therefore, the requirements of BACT are satisfied.
Top-Down BACT Analysis for VOC Emissions

Step 1 – Identify all control technologies

SJVUAPCD BACT Clearinghouse, Guideline 6 3 1, Asphaltic Concrete – Drum Mix Plant, = or > 2,000 ton/day or = or > 75 6 MMBtu/hr burner, 1st quarter 2015, identifies BACT for VOC emissions as follows

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Achieved in Practice or contained in SIP</th>
<th>Technologically Feasible</th>
<th>Alternate Basic Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>Natural gas or LPG as a primary fuel and enclosed hot mix silos and loadout operation vented to the rotary-dryer burner</td>
<td>Enclosed hot mix silos and loadout operation vented to an afterburner</td>
<td></td>
</tr>
</tbody>
</table>

Step 2 - Eliminate Technologically Infeasible Options

None of the above listed options are technologically infeasible

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

<table>
<thead>
<tr>
<th>Rank</th>
<th>Control Technology</th>
<th>Achieved in Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enclosed hot mix silos and loadout operation vented to an afterburner</td>
<td>N</td>
</tr>
<tr>
<td>2</td>
<td>Natural gas or LPG as a primary fuel and enclosed hot mix silos and loadout operation vented to the rotary-dryer burner</td>
<td>Y</td>
</tr>
</tbody>
</table>

There are no remaining control technologies for VOC

Step 4 - Cost Effectiveness Analysis

Only the dryer triggers BACT in this project. The BACT requirements for the other emission units are not applicable. Therefore, the requirements of the technologically feasible option are not applicable to this project.

The applicant is proposing the most effective control technology for VOC, therefore, a cost effectiveness analysis is not required.
Step 5 - Select BACT

Pursuant to the above Top-Down BACT Analysis, BACT for the hot mix asphalt dryer must be satisfied with the following

VOC  Natural gas or LPG as a primary fuel and enclosed hot mix silos and loadout operation vented to the rotary-dryer burner (Achieved in Practice)

The applicant has proposed natural gas as a primary fuel. Only the dryer triggers BACT in this project. The BACT requirements for the other emission units are not applicable. Therefore, the requirements of BACT are satisfied
APPENDIX C

Health Risk Assessment and Ambient Air Quality Analysis
San Joaquin Valley Air Pollution Control District
Risk Management Review

To: Stanley Tom, AQE – Permit Services
From: Trevor Joy, AQS
Date: March 31, 2015
Facility Name: Granite Construction Co
Location: 38940 Highway 33 Coalinga
Application #(s): C-590-9-8, 10-3, and 18-0
Project #: 1150690 (1150587)

A RMR SUMMARY

<table>
<thead>
<tr>
<th>Categories</th>
<th>Drying and Mixing Process (Units 9-8, 10-3, 18-0)</th>
<th>Project Totals</th>
<th>Facility Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prioritization Score</td>
<td>0 00</td>
<td>0 0</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Acute Hazard Index</td>
<td>0 00</td>
<td>0 00</td>
<td>0 00</td>
</tr>
<tr>
<td>Chronic Hazard Index</td>
<td>0 00</td>
<td>0 00</td>
<td>0 00</td>
</tr>
<tr>
<td>Maximum Individual Cancer Risk (10^6)</td>
<td>0 03</td>
<td>0 03</td>
<td>0 23*</td>
</tr>
<tr>
<td>T-BACT Required?</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Permit Conditions?</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Facility total includes the risk from N-366

Proposed Permit Conditions

To ensure that human health risks will not exceed District allowable levels, the following permit conditions must be included for

Unit # 9-8
{1898} The exhaust stack shall vent vertically upward The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction [District Rule 4102] N

Units 10-3 (Just the Baghouses)
{1898} The exhaust stacks shall vent vertically upward The vertical exhaust flows shall not be impeded by a rain cap, roof overhang, or any other obstruction [District Rule 4102] N

Units 18-0
No special conditions required
B  RMR REPORT

I  Project Description

Technical Services received a request on March 5, 2015 to perform a Risk Management Review for a proposed modification to the drying process, going from a 120 MMBtu/hr drying unit to a 135 MMBtu/hr unit, and to add aggregate processing and lime processing and storage units.

II  Analysis

Technical Services performed a prioritization using the District's HEARTs database. Emissions were calculated using 'NG >100 MMBTU/Hr External Combustion' and 'Aggregate Batch Plant' emission factors. It was determined that the lime didn't have any associated risk. In accordance with the District's Risk Management Policy for Permitting New and Modified Sources (APR 1905, March 2, 2001), risks from the proposed unit's toxic emissions were prioritized using the procedure in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEARTs database. The prioritization score for the facility was greater than 1.0 (see RMR Summary Table). Therefore, a refined analysis was required and performed. AERMOD was used, with the parameters outlined below and concatenated meteorological data for Kettleman City 2007 to 2011 to determine the maximum dispersion factor at the nearest residential and business receptors. These dispersion factors were input into the HARP model to calculate the chronic and acute hazard indices and the carcinogenic risk for the project. AERMOD was used for the AAQA analysis, with the parameters outlined below and meteorological data for Kettleman City 2007 to 2011 to determine the maximum dispersion factors.

The following parameters were used for the review:

<table>
<thead>
<tr>
<th>Analysis Parameter</th>
<th>Unit 9-8 (Dryer) [Stack 1]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closest Receptor - Business (m)</td>
<td>1340</td>
</tr>
<tr>
<td>NG Usage Increase (MMScf/hr)*</td>
<td>0.015</td>
</tr>
<tr>
<td>Release Height (m)</td>
<td>9.3</td>
</tr>
<tr>
<td>Stack Inside Diameter (m)</td>
<td>1.55</td>
</tr>
<tr>
<td>Nox Emissions (lbs/hr)</td>
<td>4.0</td>
</tr>
<tr>
<td>Sox Emissions (lbs/hr)</td>
<td>0.19</td>
</tr>
<tr>
<td>PM Emissions (lbs/hr)</td>
<td>2.67</td>
</tr>
<tr>
<td>CO Emissions (lbs/hr)</td>
<td>19.5</td>
</tr>
</tbody>
</table>

*Hour emissions based on 24 hours a day operation.
### Analysis Parameter
Unit 18-0 Baghouse [Lime] [Stack 2]

<table>
<thead>
<tr>
<th>Analysis Parameter</th>
<th>Closest Receptor - Business (m)</th>
<th>Closest Receptor - Resident (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lime PM Emissions*</td>
<td>0.03 lbs/hr**</td>
<td>183 lbs/yr</td>
</tr>
<tr>
<td>Release Height (m)</td>
<td>11.6</td>
<td>Baghouse Exit Temperature</td>
</tr>
<tr>
<td>Diameter (m)</td>
<td>1.16</td>
<td>Exit Velocity (ACFM)</td>
</tr>
</tbody>
</table>

*Emissions didn't have an associated RMR risk and were only used for AAQA purposes

**Hour emissions based on 16 hours a day operation

### Analysis Parameter
Unit 18-0 Baghouse [Lime] [Stack 3]

<table>
<thead>
<tr>
<th>Analysis Parameter</th>
<th>Closest Receptor - Business (m)</th>
<th>Closest Receptor - Resident (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lime PM Emissions*</td>
<td>0.03 lbs/hr**</td>
<td>183 lbs/yr</td>
</tr>
<tr>
<td>Release Height (m)</td>
<td>14.6</td>
<td>Baghouse Exit Temperature</td>
</tr>
<tr>
<td>Diameter (m)</td>
<td>1.16</td>
<td>Exit Velocity (ACFM)</td>
</tr>
</tbody>
</table>

*Emissions didn't have an associated RMR risk and were only used for AAQA purposes

**Hour emissions based on 16 hours a day operation

### Analysis Parameter
Unit 10-3 (Aggregate) [Cold Feed Bins Area Source 1, 2, and 3 Each]

<table>
<thead>
<tr>
<th>Analysis Parameter</th>
<th>Closest Receptor - Business (m)</th>
<th>Closest Receptor - Resident (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bin Length</td>
<td>2.44</td>
<td>Bin Width 3.66</td>
</tr>
<tr>
<td>Bin Height</td>
<td>5.2</td>
<td>PM Emissions 0.0125 lbs/yr</td>
</tr>
</tbody>
</table>

*Hour emissions based on 16 hours a day operation

### Analysis Parameter
Unit 10-3 (Aggregate) [Conveyor Area Source 4, and 5 Each]

<table>
<thead>
<tr>
<th>Analysis Parameter</th>
<th>Closest Receptor - Business (m)</th>
<th>Closest Receptor - Resident (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conveyor Length (m)</td>
<td>27.45</td>
<td>Conveyor Width (m) 0.915</td>
</tr>
<tr>
<td>Conveyor Height (m)</td>
<td>5.49</td>
<td>PM Emissions 0.01725 lbs/hr*</td>
</tr>
<tr>
<td>PM Emissions (lbs/yr)</td>
<td>110</td>
<td></td>
</tr>
</tbody>
</table>

*Hour emissions based on 16 hours a day operation
### Analysis Parameter
#### Unit 18-0 (Lime) Pugmill Area Source 6

<table>
<thead>
<tr>
<th>Closest Receptor - Business (m)</th>
<th>1647</th>
<th>Closest Receptor - Resident (m)</th>
<th>640</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width (m)</td>
<td>1.83</td>
<td>Length (m)</td>
<td>3.66</td>
</tr>
<tr>
<td>Height (m)</td>
<td>1.22</td>
<td>PM Emissions* (lbs/yr**)</td>
<td>0.0375</td>
</tr>
</tbody>
</table>

*Emissions didn’t have an associated RMR risk and were only used for AAQA purposes

**Hour emissions based on 16 hours a day operation

#### Analysis Parameter
#### Unit 18-0 (Lime) Pugmill Conveyor Area Source 7

<table>
<thead>
<tr>
<th>Closest Receptor - Business (m)</th>
<th>1647</th>
<th>Closest Receptor - Resident (m)</th>
<th>640</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width (m)</td>
<td>0.915</td>
<td>Length (m)</td>
<td>18.3</td>
</tr>
<tr>
<td>Height (m)</td>
<td>0</td>
<td>PM Emissions* (lbs/yr**)</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Emissions didn’t have an associated RMR risk and were only used for AAQA purposes

**Hour emissions based on 16 hours a day operation

Technical Services also performed modeling for criteria pollutants CO, NOx, SOx and PM10, as well as a RMR.

The results from the Criteria Pollutant Modeling are as follows

### Criteria Pollutant Modeling Results*

<table>
<thead>
<tr>
<th></th>
<th>1 Hour</th>
<th>3 Hours</th>
<th>8 Hours</th>
<th>24 Hours</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>Pass</td>
<td></td>
<td>Pass</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>NOx</td>
<td>Pass¹</td>
<td>X</td>
<td>X</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>SOx</td>
<td>Pass²</td>
<td>Pass</td>
<td>X</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PM10</td>
<td>X</td>
<td>X</td>
<td>Pass³</td>
<td>Pass³</td>
<td></td>
</tr>
<tr>
<td>PM2.5</td>
<td>X</td>
<td>X</td>
<td>Pass⁴</td>
<td>Pass⁴</td>
<td></td>
</tr>
</tbody>
</table>

*Results were taken from the attached PSD spreadsheet

¹The project was compared to the 1-hour NO2 National Ambient Air Quality Standard that became effective on April 12, 2010 using the District’s approved procedures. The criteria pollutant 1-hour value passed using TIER I NO2 NAAQS modeling

²The project was compared to the 1-hour SO2 National Ambient Air Quality Standard that became effective on August 23, 2010 using the District’s approved procedures.

³The maximum predicted concentration for emissions of these criteria pollutants from the proposed unit are below EPA’s level of significance as found in 40 CFR Part 51 165 (b)(2). Fugitive emissions threshold values were used in the evaluation

### Conclusion

The acute and chronic hazard indices were below 1.0, and the cancer risk is less than or equal to 1.0 in a million. In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).
To ensure that human health risks will not exceed District allowable levels, the permit conditions listed on page 1 of this report must be included for this proposed unit.

The emissions from the proposed equipment will not cause or contribute significantly to a violation of the State and National AAQS.

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

**Attachments**

A  RMR request from the project engineer
B  Prioritization score with toxic emissions summary
C  HEARTS – Facility Summary
   AAQA spreadsheet
APPENDIX D

Draft Authority to Construct Permit
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO C-590-9-8

LEGAL OWNER OR OPERATOR GRANITE CONSTRUCTION, COALINGA
MAILING ADDRESS P O BOX 15287
SACRAMENTO, CA 95851

LOCATION 38940 HIGHWAY 33
COALINGA, CA 93210

EQUIPMENT DESCRIPTION
MODIFICATION OF ASPHALTIC CONCRETE BATCH PLANT WITH 120 MMBTU/HR NORTH AMERICAN LOW NOX BURNER SERVED BY BMG MODEL BH4505-S PULSE JET BAGHOUSE, A WARM ASPHALT MIX SYSTEM, A LIQUID ANTI-STRIP METERING SYSTEM AND TWO EXEMPT 30 KGA ASPHALT OIL STORAGE TANKS WITH 2 1 MMBTU/HR NATURAL GAS FIRED HEAT TRANSFER SYSTEM AND DEMISTER SYSTEM REPLACE DRYER WITH A 135 MMBTU/HR DRYER EQUIPPED WITH A GENCO EQUINOX LOW NOX BURNER WITH FLUE GAS RECIRCULATION

CONDITIONS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance [District Rule 4102]

2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity [District Rule 4101 and 40 CFR 60 92(a)(2)]

3. All equipment shall be maintained and operated according to the specifications and plans contained in the permit application except as otherwise specified herein [District Rule 2201]

4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction [District Rule 4102]

5. The baghouse shall be maintained and operated according to manufacturer's specifications [District Rule 2201]

6. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency [District Rule 2201]

7. Material removed from the dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO
8 Replacement bags numbering at least 10% of the total number of bags in the baghouse shall be maintained on the premises [District Rule 2201]

9 There shall be no visible emissions in excess of 5% opacity for a period or periods aggregating more than three (3) minutes in any one hour [District Rule 2201]

10 The baghouse shall be equipped with a pressure differential gauge to indicate a pressure drop ranging from 1" to 5" water column across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location [District Rule 2201]

11 The Hot Mix Asphalt drum mixer burner must have an individual fuel flow metering device installed in the natural gas fuel supply line [District Rule 2201]

12 Material removed from dust collector(s) shall be disposed of in a manner preventing entrainment into the atmosphere [District Rule 2201]

13 The baghouse shall have a control efficiency shall be at least 99% [District Rule 2201]

14 Hot Mix Asphalt (asphaltic concrete) production shall not exceed either of the following limits 8,000 tons per day or 822,150 tons per year [District Rule 2201]

15 The Hot Mix Asphalt drum mixer burner shall be fired on natural gas fuel only [District Rule 2201]

16 Natural gas fuel usage shall not exceed either of the following limits 1,946,096 cubic feet per day or 200 million cubic feet per year [District Rule 2201]

17 Particulate matter emissions from the baghouse shall not exceed 0.04 grains/dscf in concentration per New Source Performance Standards - 40 CFR 60, Subpart I, (Standards of Performance for Hot Mix Asphalt Facilities) [40 CFR 60 92(a)(1)]

18 Source testing to demonstrate compliance with the particulate matter (PM) emissions concentration (gr-PM/dscf) from the exhaust stack of the baghouse and particulate matter (PM10) emission rate per ton of asphalt produced (lb-PM10/ton) shall be conducted within 60 equipment operating days of initial startup. An equipment operating day is any day in which the drum dryer/mixer is operated where material is introduced into the drum dryer/mixer or processed by the drum dryer/mixer, or where fuel is combusted in the drum dryer [40 CFR 60 8(a)]

19 Instead of testing for both PM and PM10 emissions, the results of the PM test may be used for compliance with the PM10 emissions limit provided the results include both the filterable and condensable (i.e., back-half) particulates, and that all measured particulate matter is assumed to be PM10. If this option is exercised, source testing shall be conducted using CARB Method 5 or EPA Method 5 (including condensable particulates) [District Rule 1081]

20 Source testing to determine the particulate matter concentration from the baghouse shall be conducted using EPA Method 5 [40 CFR 60 93(b)(1)]

21 Compliance with opacity limits shall be determined according to EPA Method 9 [40 CFR 60 93(b)(2)]

22 Emissions shall not exceed 0.008 lb-PM10/ton of Hot Mix Asphalt [District Rule 2201]

23 Emissions from the burner shall not exceed any of the following limits 0.0492 lb-NOx/MMBtu (or 4.3 ppmv NOX @ 19% O2), 0.24 lb-CO/MMBtu (or 34.5 ppmv CO @ 19% O2), 0.017 lb-VOC/MMBtu, or 0.19 lb-S0x/hr [District Rules 2201 and 4309]

24 Source testing to measure NOx and CO emissions from this unit shall be conducted within 60 equipment operating days of initial startup and at least once every 24 months thereafter. An equipment operating day is any day in which the drum dryer/mixer is operated where material is introduced into the drum dryer/mixer or processed by the drum dryer/mixer, or where fuel is combusted in the drum dryer [District Rules 2201 and 4309]

25 The following test methods shall be used NOx - EPA Method 7E, CO - EPA Method 10, stack gas oxygen - EPA Method 3 or 3A, stack gas velocities - EPA Method 2, & stack gas moisture content - EPA Method 4 [District Rule 4309]

26 For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit [District Rule 4309]

CONDITIONS CONTINUE ON NEXT PAGE
27 All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 30 of District Rule 4309 [District Rule 4309]

28 Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing [District Rule 1081]

29 The results of each source test shall be submitted to the District within 60 days thereafter [District Rule 1081]

30 All test results for NOx and CO shall be reported in ppmv @ 19% O2 (or no correction if measured above 19% O2), corrected to dry stack conditions [District Rule 4309]

31 Source testing to measure NOx and CO emissions from the asphaltic concrete batch plant shall be conducted utilizing one of the following options: (a) Test the unit using locally mined aggregate in the dryer. If the source test using locally mined aggregate fails, the operator may re-run the source test using aggregate from a different source, (b) Test the unit using aggregate from a source different from the source used during normal operations, (c) Test the unit using a heat-absorbing material in the dryer, but no aggregate, (d) Test the unit with no material in the dryer [District Rule 4309]

32 The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month in which asphalt is produced on at least five days or for at least 32 hours, whichever comes first (and in which a source test is not performed), using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e., the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 production days of restarting the unit unless monitoring has been performed within the last month [District Rule 4309]

33 If either the NOx or CO concentrations corrected to 19% O2 (or no correction if measured above 19% O2), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition [District Rule 4309]

34 All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period [District Rule 4309]

35 The permittee shall maintain records of (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 19% O2 (or no correction if measured above 19% O2), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309]

36 The operator shall not manufacture for sale nor use within the District anything of the following for penetrating prime coat, tack coat, dust palliative, or other paving and maintenance operations (1) rapid cure cutback asphalt, (2) medium cure cutback asphalt (unless the National Weather Service official forecast of the high temperature for the 24 hour period following application is below 50°F), (3) slow cure asphalt which is produced for application, contains more than one-half (0.5) percent of organic compounds which evaporate at 500 degrees Fahrenheit or lower, (4) emulsified asphalt containing organic compounds, in excess of three (3) percent by volume, which evaporate at 500 degrees Fahrenheit or lower [District Rule 4641]
37 The manufacturer of cutback and slow cure asphalt shall maintain records showing the types and amounts of cutback asphalt and slow cure asphalt which contain organic compounds produced and the destination of these products. Such records shall be maintained daily and retained and available for inspection by District personnel for a period of 5 years [District Rule 4641].

38 Differential operating pressure shall be monitored and recorded on each day that the baghouse operates [District Rule 2201].

39 Records of all maintenance of the baghouse, including all change outs of filter media, shall be maintained [District Rule 2201].

40 Records of daily and annual natural gas fuel usage, and daily and annual Hot Mix Asphalt (asphaltic concrete) production shall be maintained [District Rules 2201 and 1070].

41 All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request [District Rule 1070].

42 This permit does not authorize the violation of any conditions established for this facility in the Conditional Use Permit (CUP), Special Use Permit (SUP), Site Approval, Site Plan Review (SPR), or other approval documents issued by a local, state, or federal agency [Public Resources Code 21000-21177 California Environmental Quality Act].
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO  C-590-10-3

LEGAL OWNER OR OPERATOR  GRANITE CONSTRUCTION, COALINGA
MAILING ADDRESS  P O BOX 15287
SACRAMENTO, CA 95851

LOCATION  38940 HIGHWAY 33
COALINGA, CA 93210

EQUIPMENT DESCRIPTION
MODIFICATION OF AGGREGATE HANDLING OPERATION CONSISTING OF SEVEN COLD AGGREGATE FEED BINS
WITH SEVEN BELT FEEDERS, ASSOCIATED BELT CONVEYORS, WATER SPRAY BARS, PARALLEL CONVEYOR
BELT, AND TWO VIBRATING SCREENS PROVIDING RAW MATERIAL FOR A HOT MIX (C-0590-9) AND RECLAIMED
ASPHALT PAVEMENT OPERATION ADD THREE COLD AGGREGATE FEED BINS AND TWO CONVEYORS

CONDITIONS

1  All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize
emissions of air contaminants into the atmosphere  [District Rule 2201]

2  The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap
(flapper ok), roof overhang, or any other obstruction  [District Rule 4102]

3  Moisture content of the material being processed, after application of wet suppression control, shall be at least 1.5% by
weight or greater  [District Rule 2201]

4  All fugitive emission points shall be controlled using water spray system to minimize particulate matter emissions
[District Rule 2201]

5  Total feed bin aggregate raw material throughput shall not exceed 7,520 tons per day  [District Rule 2201]

6  Total aggregate raw material throughput for each aggregate conveyor #1 and #2 shall not exceed 6,000 tons per day
[District Rule 2201]

7  Total feed bin aggregate raw material throughput for each cold feed bin #1, #2, and #3 shall not exceed 4,000 tons per
day  [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE
Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the
approved plans specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all
Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050 this
Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with
all laws ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO
8 There shall be no visible emissions in excess of 5% opacity for a period or periods aggregating more than three (3) minutes in any one hour [District Rule 4101]

9 Emissions shall not exceed 0.00106 lb PM10 per ton of raw material throughput [District Rule 2201]

10 Records of daily feed bin aggregate raw material throughput shall be maintained, retained on the premises for at least five years, and made readily available for District inspection upon request [District Rule 2201]

11 All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request [District Rule 1070]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO C-590-18-0
LEGAL OWNER OR OPERATOR GRANITE CONSTRUCTION, COALINGA
MAILING ADDRESS P. O. BOX 15287
SACRAMENTO, CA 95851
LOCATION 38940 HIGHWAY 33
COALINGA, CA 93210

EQUIPMENT DESCRIPTION
DRY LIME OPERATION CONSISTING OF A SCREW PUGMILL, A PUGMILL BELT CONVEYOR, AN ENCLOSED LIME
FEEDER BELT, A LIME AUGER, AN UNLOADING LIME BLOWER, AND TWO LIME STORAGE SILOS SERVED BY
TWO DUSTY DUSTLESS BAGHOUSES

CONDITIONS
1. No air contaminant shall be released into the atmosphere which causes a public nuisance [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three
   minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity [District Rule 4101]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration [District Rule 4201]
4. Visible emissions from the dust collector serving the lime storage silo shall not equal or exceed 5% opacity for a
   period or periods aggregating more than three minutes in one hour [District Rules 2201 and 4101]
5. The dust collector shall be maintained and operated according to manufacturer's specifications [District Rule 2201]
6. The dust collector cleaning frequency and duration shall be adjusted to optimize the control efficiency [District Rule
   2201]
7. Material removed from the dust collector(s) shall be disposed of in a manner preventing entrainment into the
   atmosphere [District Rule 2201]
8. Replacement filters numbering at least 10% of the total number of filters shall be maintained on the premises [District
   Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the
approved plans, specifications, and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all
Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this
Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with
all laws, ordinances, and regulations of all governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

Arnaud Manjollet, Director of Permit Services

Central Regional Office • 1990 E Gettysburg Ave • Fresno, CA 93726 • (559) 230-5900 • Fax (559) 230-6061
9. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201]

10. The differential pressure gauge reading range shall be established per manufacturer's recommendation at time of start up inspection. [District Rule 2201]

11. The maximum amount of lime received shall not exceed 100 ton/day. [District Rule 2201]

12. Particulate matter emissions from this operation shall not exceed 1.6 lb-PM10/day. [District Rule 2201]

13. The material processed in the pugmill and pugmill conveyor shall have a moisture content of at least 3% by weight. [District Rule 2201]

14. Moisture content of the material processed in the pugmill and pugmill conveyor shall be measured on a monthly basis and when requested by the District. [District Rule 2201]

15. The percent moisture shall be determined by weighing an approximately 2-lb sample of lime/aggregate, bringing the sample to dryness in a drying oven, then weighing the dried sample. The weight difference divided by the dry weight multiplied by 100% is the moisture content. [District Rule 2201]

16. Differential operating pressure shall be monitored and recorded on each day that the baghouse operates. [District Rule 2201]

17. Records of all maintenance of the dust collector, including all change outs of filter media, shall be maintained. [District Rules 1070 and 2201]

18. Records of daily amount of lime received (in tons) each day shall be maintained. [District Rules 1070 and 2201]

19. Records of monthly moisture content of lime/aggregate processed in the pugmill and pugmill conveyor shall be maintained. [District Rules 1070 and 2201]

20. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070]