Permit to Construct Permit No. P-2009.0118

Final

Valley Paving & Asphalt, Inc.
Portable
(Current Location: McCall)
Facility ID No. 777-00086

October 15, 2009
Mary Capiral
Permit Writer

The purpose of this Statement of Basis is to satisfy the requirements of IDAPA 58.01.01.et seq. Rules for the Control of Air Pollution in Idaho, for issuing air permits.
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APPENDIX A – AIRS INFORMATION
### Acronyms, Units, and Chemical Nomenclature

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRS</td>
<td>Aerometric Information Retrieval System</td>
</tr>
<tr>
<td>AQCR</td>
<td>Air Quality Control Region</td>
</tr>
<tr>
<td>Btu</td>
<td>British thermal unit</td>
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<tr>
<td>CAM</td>
<td>Compliance Assurance Monitoring</td>
</tr>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>CO</td>
<td>carbon monoxide</td>
</tr>
<tr>
<td>DEQ</td>
<td>Department of Environmental Quality</td>
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<tr>
<td>EPA</td>
<td>U.S. Environmental Protection Agency</td>
</tr>
<tr>
<td>IDAPA</td>
<td>a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act</td>
</tr>
<tr>
<td>MACT</td>
<td>Maximum Achievable Control Technology</td>
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<tr>
<td>MMBtu</td>
<td>million British thermal units</td>
</tr>
<tr>
<td>NESHAP</td>
<td>National Emission Standards for Hazardous Air Pollutants</td>
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<tr>
<td>NO₂</td>
<td>nitrogen dioxide</td>
</tr>
<tr>
<td>NOₓ</td>
<td>nitrogen oxides</td>
</tr>
<tr>
<td>NSPS</td>
<td>New Source Performance Standards</td>
</tr>
<tr>
<td>PM</td>
<td>particulate matter</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers</td>
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<tr>
<td>PSD</td>
<td>Prevention of Significant Deterioration</td>
</tr>
<tr>
<td>PTC</td>
<td>permit to construct</td>
</tr>
<tr>
<td>Rules</td>
<td>Rules for the Control of Air Pollution in Idaho</td>
</tr>
<tr>
<td>SIC</td>
<td>Standard Industrial Classification</td>
</tr>
<tr>
<td>SO₂</td>
<td>sulfur dioxide</td>
</tr>
<tr>
<td>SOₓ</td>
<td>sulfur oxides</td>
</tr>
<tr>
<td>T/yr</td>
<td>tons per year</td>
</tr>
<tr>
<td>TAP</td>
<td>toxic air pollutant</td>
</tr>
<tr>
<td>UTM</td>
<td>Universal Transverse Mercator</td>
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</tbody>
</table>
1. FACILITY INFORMATION

1.1 Facility Description

The facility is a portable hot-mix asphalt plant. Aggregate, sand, and asphalt chips (RAP or recycled asphalt product) are transferred to feed bins, then conveyed to a 70 MMBtu/hr oil-fired, parallel flow, drum-mix aggregate dryer. Heated asphalt oil from a storage tank is introduced to the middle of the drum unit and mixed with the aggregate. The resulting asphalt product is then transferred to a storage silo via an enclosed stat conveyor and held until it is later loaded onto trucks and hauled offsite. The production of hot-mix asphalt includes aggregate handling operations which may include front end loaders, storage bins, conveyance systems, stock piles and haul trucks.

Electrical power for the plant is provided by the local power grid. The asphalt drum-mix dryer is fueled by used oil or No. 2 fuel oil.

1.2 Permitting Action and Facility Permitting History

This PTC is a revision of an existing PTC. The following information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

August 4, 2008  P-060024, PTC modification, Permit status (A, will be S as a result of this project)

June 10, 1993  777-00086, Initial PTC, Permit status (S)

2. APPLICATION SCOPE AND APPLICATION CHRONOLOGY

2.1 Application Scope

The purpose of this project is to allow the following modifications:

- Change the Odor Management Plan Permit Condition in P-060024, issued August 4, 2008, to make the utilization of waste oil for burner fuel the trigger for the Odor Management Plan.

- Change the Performance Testing Requirements Permit Condition in P-060024, issued August 4, 2008, to eliminate the variable testing schedules and change the frequency to once every five years.
  
  See section 4.3 (Permit Conditions Review) of this Statement of Basis for justification of the above revisions.

- Change the Equipment List in the Statement of Basis to correct the number and capacities of storage tanks used.

Notes: In their application, the facility requested that period for monitoring and recordkeeping of HMA production in the Operating Parameters Permit Condition in P-060024, issued August 4, be revised from “per each consecutive 12-month period” to “January 1st to December 31st.” The monitoring and recordkeeping period for HMA production cannot be changed because Valley Paving & Asphalt, Inc. needs to demonstrate continuous compliance with the HMA production limits. In addition, the application requested that the performance testing deadline be extended. This request will be addressed by the Boise Regional Office (BRO).
2.2 Application Chronology

September 9, 2009  PTC project P-2009.0118 along with a $1,000 PTC application fee was received.

September 24, 2009  Project P-2009.0118 was deemed complete.

September 25, 2009  Draft permit and statement of basis were sent for peer and Boise Regional Office review.

September 30, 2009  Draft permit and statement of basis were sent to the facility for Applicant review.

October 6, 2009  $250 PTC processing fee was received.

October 9, 2009  End of facility review period. No comments were received from the facility on the draft permit and statement of basis.

October 15, 2009  Final permit and statement of basis were issued.
3. TECHNICAL ANALYSIS

3.1 Emission Unit and Control Device

For details regarding the emissions units and control devices used at this facility, refer to the Statement of Basis for PTC No. P-060024, issued on August 4, 2008. This information was not changed as a result of this project.

3.2 Emissions Inventory

In their application, the facility requested that the Equipment List be revised to correct the number and capacities of storage tanks used.

Equipment List

**HMA Plant:**
Manufacturer: Aesco
Burner Model: SJ360
Type of HMA plant: Parallel flow
Drum dryer rated heat input capacity: 70 MMBtu/hr drum dryer

**Wet Venturi Scrubber:**
Manufacturer: Aesco
Model: GB200 VWS

**Associated Storage Equipment:**
Two (2) asphaltic oil storage tanks:
#1: 10,000 gallon capacity
#2: 20,000 gallon capacity

Three (3) fuel storage tanks:
#1: 15,000 gallon capacity
#2: 15,000 gallon capacity
#3: 10,000 gallon capacity

The emissions inventory was not changed as a result of this project. For details regarding the emissions inventory for this facility, refer to the Statement of Basis for PTC No. P-060024, issued on August 4, 2008.

3.3 Ambient Air Quality Impact Analysis

An ambient air quality impact analysis is not required for this project because the project does not result in a change in potential emissions of criteria pollutants and/or TAPs.

4. REGULATORY REVIEW

4.1 Attainment Designation (40 CFR 81.313)

The facility is located in Idaho County which is designated as attainment or unclassifiable for PM_{10}, PM_{2.5}, CO, NO_{2}, SO_{x}, and Ozone. Reference 40 CFR 81.313.

4.2 Permit to Construct (IDAPA 58.01.01.201)

The facility requested revisions to permit conditions in their current PTC. Therefore, a PTC modification is required.
4.3 Tier II Operating Permit (IDAPA 58.01.01.401)

IDAPA 58.01.01.401............................. Tier II Operating Permits

The facility is not subject to IDAPA 58.01.01.300 through 399 and is not requesting an option Tier II operating permit. Therefore, the requirements of IDAPA 58.01.01.401 do not apply.

4.4 Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)

IDAPA 58.01.01.301............................. Tier I Operating Permit

The facility is not a Tier I source in accordance with IDAPA 58.01.01.006.113. Therefore, the requirements of IDAPA 58.01.01.301 do not apply.

4.5 PSD Classification (40 CFR 52.21)

For details regarding the PSD Classification for this facility, refer to the Statement of Basis for PTC No. P-060024, issued on August 4, 2008. This information was not changed as a result of this project.

4.6 NSPS Applicability (40 CFR 60)

40 CFR 60, Subparts K, Ka, and Kb are Standards of Performance for storage vessels for petroleum liquids/volatile organic liquids. The Valley Paving & Asphalt, Inc. facility has two (2) asphaltic oil storage tanks and three (3) fuel storage tanks:

Two (2) asphaltic oil storage tanks:
#1: 10,000 gallon capacity
#2: 20,000 gallon capacity

Three (3) fuel storage tanks:
#1: 15,000 gallon capacity
#2: 15,000 gallon capacity
#3: 10,000 gallon capacity

The subparts apply depending on the construction, reconstruction, or modification date of the storage tanks. Since the construction date of each storage tank is unknown, all three subparts will be considered.


In accordance to § 60.110, the requirements of this subpart are applicable to each storage vessel for petroleum liquids with a storage capacity greater than 151,412 liters (40,000 gallons) for which construction, reconstruction, or modification is commenced after June 11, 1973 and prior to May 19, 1978. All of the storage tanks each have volume capacities that are less than 151,416 liters (40,000 gallons) and are therefore not subject to the requirements of this subpart.


In accordance to § 60.110a, the requirements of this subpart are applicable to each storage vessel with a storage capacity greater than 151,416 liters (40,000 gallons) that is used to store petroleum liquids for which construction, reconstruction, or modification is commenced after May 18, 1978 and prior to July 23, 1984. All of the storage tanks each have volume capacities that are less than 151,416 liters (40,000 gallons) and are therefore not subject to the requirements of this subpart.
40 CFR 60, Subpart Kb ...................... Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

In accordance with § 60.110(b), the requirements of this subpart applies to each storage vessel with a capacity greater than or equal to 75 cubic meters (m$^3$) (19,813 gallons) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984. All of the fuel storage tanks and the asphaltic oil storage tank #1 each have volume capacities that are less than 75 m$^3$ (19,813 gallons) and are therefore not subject to the requirements of this subpart. The asphaltic oil storage tank #2 has a volume capacity greater than 75 m$^3$ (19,813 gallons) and is therefore potentially subject to the requirements of this subpart.

In accordance with §60.110(b), this subpart does not apply to storage vessels with a capacity greater than or equal to 75 m$^3$ (19,813 gallons) but less than 151 m$^3$ (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 15.0 kPa. The asphaltic oil storage tank #2 has a volume capacity between 75 m$^3$ and 151 m$^3$. However, since asphaltic oil has a low true vapor pressure (less than 15.0 kPa), the asphaltic oil storage tank #2 is not subject to the requirements of this subpart.

For details regarding other applicable NSPS Subparts for this facility, refer to the Statement of Basis for PTC No. P-060024, issued on August 4, 2008.

4.7 NESHAP Applicability (40 CFR 61)

For details regarding the NESHAP Applicability for this facility, refer to the Statement of Basis for PTC No. P-060024, issued on August 4, 2008. This information was not changed as a result of this project.

4.8 MACT Applicability (40 CFR 63)

For details regarding the MACT Applicability for this facility, refer to the Statement of Basis for No. P-060024, issued on August 4, 2008. This information was not changed as a result of this project.

4.9 CAM Applicability (40 CFR 64)

For details regarding the CAM Applicability for this facility, refer to the Statement of Basis for PTC No. P-060024, issued on August 4, 2008. This information was not changed as a result of this project.

4.10 Permit Conditions Review

This section describes the permit conditions for this initial permit or only those permit conditions that have been added, revised, modified or deleted as a result of this permitting action.

Old Permit Condition 3.17 (Odor Management Plan) was revised so that the Odor Management Plan is triggered only when waste oil is used as fuel. This permit condition was included in PTC No. P-060024, issued August 4, 2008, to ensure that the facility will control odors resulting from the use of waste oil as fuel. Since the issuance of PTC No. P-060024, Valley Paving & Asphalt, Inc. has not burned waste oil and only one odor complaint was received. The validity of the odor complaint, which was received in June 22, 2009, is unknown since the complaint was received by the facility four days after the odor was observed. Thus, the facility had no opportunity to investigate the odor complaint. Since the only potential source of odor from the facility's operations is waste oil combustion, it is appropriate to require the Odor Management Plan only when waste oil is burned. The Odors and Odor Complaints Permit Conditions remain unchanged in the permit. The Odors Permit Condition states that "the permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids into the atmosphere in such quantities as to cause air pollution." The Odor Complaints Permit Conditions
requires that the permittee maintain records of all odor complaints received. These requirements were established to minimize odors from the facility and are consistent with the requirements in other air quality permits.

Old Permit Condition 3.20 (Performance Testing Requirements) was revised; the tiered test frequency requirement was deleted and the frequency of the performance tests required was changed from three years to five years. Over the past several years, DEQ has deemed that source testing every five years as appropriate and sufficient for hot-mix asphalt (HMA) plants. The Performance Testing Requirements Permit Condition was updated to reflect current DEQ source testing requirements for HMA plants.

5. **PERMIT FEES**

Table 5.1 lists the processing fee associated with this permitting action. The facility is subject to a processing fee of $250 because there is no increase in permitted emissions and the permit modifications required no engineering analysis. Refer to the chronology for fee receipt dates.

6. **PUBLIC COMMENT**

An opportunity for public comment is not required for a permit revision where there is no increase in allowable emissions.
Appendix A – AIRS Information
AIRS/AFS Facility-wide Classification - Data Form

Facility Name: Valley Paving & Asphalt, Inc.
Facility Location: Portable (Current Location: McCall)
Facility ID: 777-00086 Date: September 25, 2009
Project/Permit No.: P-2009.0118 Completed By: Mary Capiral

☐ Check if there are no changes to the facility-wide classification resulting from this action. (compare to form with last permit)

Comments:

☐ Yes, this facility is an SM80 source.

Identify the facility’s area classification as A (attainment), N (nonattainment), or U (unclassified) for the following pollutants:

Area Classification: SO2 PM10 VOC DO NOT LEAVE ANY BLANK

Check one of the following:

☐ SIP [0] - Yes, this facility is subject to SIP requirements. (do not use if facility is Title V)

☐ Title V [V] - Yes, this facility is subject to Title V requirements. (if yes, do not also use SIP listed above)

For SIP or TV, identify the classification (A, SM, B, C, or ND) for the pollutants listed below. Leave box blank if pollutant is not applicable to facility.

Classification:

☐ PSD [6] - Yes, this facility has a PSD permit.

If yes, identify the pollutant(s) listed below that apply to PSD. Leave box blank if pollutant does not apply to PSD.

Classification:

☐ NSR - NAA [7] - Yes, this facility is subject to NSR nonattainment area (IDAPA 58.01.01.204) requirements.

Note: As of 9/12/08, Idaho has no facility in this category.

If yes, identify the pollutant(s) listed below that apply to NSR-NAA. Leave box blank if pollutant does not apply to NSR-NAA.

Classification:

☐ NESHAP [8] - Yes, this facility is subject to NESHAP (Part 61) requirements. (THAP only)

If yes, what CFR Subpart(s) is applicable?

☐ NSPS [9] - Yes, this facility is subject to NSPS (Part 60) requirements.

If yes, what CFR Subpart(s) is applicable?

If yes, identify the pollutant(s) regulated by the subpart(s) listed above. Leave box blank if pollutant does not apply to the NSPS.

Classification:

☐ MACT [M] - Yes, this facility is subject to MACT (Part 63) requirements. (THAP only)

If yes, what CFR Subpart(s) is applicable?