



Air Quality Permitting Statement of Basis

March 26, 2007

Permit to Construct No. P-060067

**Interstate Concrete and Asphalt Company
Rathdrum, ID**

Facility ID No. 055-00048

Prepared by:

Harbi Elshafei, Permit Writer *H.E.*
AIR QUALITY DIVISION

FINAL

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Acronyms, Units, and Chemical Nomenclatures

AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
CO	carbon monoxide
DEQ	Department of Environmental Quality
HMA	hot-mix asphalt
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
Interstate	Interstate Concrete and Asphalt Company
MACT	Maximum Achievable Control Technology
MMBtu/hr	million British thermal units per hour
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
PTC	permit to construct
RAP	recycled asphalt pavement
SIP	State Implementation Plan
SM80	synthetic minor source with emissions greater than or equal to 80% of a Tier I operating permit major source threshold
SO ₂	sulfur dioxide
SO _x	sulfur oxides
T/yr	tons per year
UTM	Universal Transverse Mercator
VOC	volatile organic compound

1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, for issuing permits to construct.

2. FACILITY DESCRIPTION

The Interstate Concrete and Asphalt Company (Interstate) has a Permit to Construct (PTC) for a hot-mix asphalt (HMA) plant at 8849 W. Wyoming Avenue, which is located 0.5 mile west of Highway 41 in Rathdrum. The plant is called the Wyoming Plant.

In the HMA plant, stockpiled aggregate is transferred to eight cold feed bins. Aggregate is dispensed from the bins onto slow moving feeder conveyors, which transfer the aggregate to the dryer. Recycled asphalt pavement (RAP) material is transferred from stockpiles to a live bottom bin. The bin feeds onto a conveyor to a lump breaker. From the lump breaker, a conveyor feeds the RAP material to the dryer where both aggregate and RAP are heated in the dryer. Aggregate and RAP travel through the rotating drum dryer countercurrent to the heating media. The material is then heated, dried, and mixed with liquid asphalt cement. The resulting HMA is then conveyed to hot storage bins until it can be loaded into dump trucks for transport off site or transferred via a conveyor to silos for temporary storage.

This PTC is for new drum mix dryer that is rated at 400 T/hr and replaces the CMI drum dryer and the baghouse which existed in PTC No. P-040101, issued February 18, 2005.

Particulate matter emissions from the HMA plant are controlled by a baghouse.

3. FACILITY / AREA CLASSIFICATION

Interstate is classified as a synthetic minor facility because enforceable operational limits limit the facility's potential to emit to less than Tier I operating permit major source thresholds. The AIRS facility classification is "SM80" because the facility's potential to emit is within 80% of the Tier I operating permit major source threshold level for a criteria air pollutant.

The facility is located within AQCR 62 and UTM zone 11. The facility is located in Kootenai County which is designated as unclassifiable for all criteria pollutants (PM₁₀, CO, NO_x, SO₂, lead, and ozone).

The AIRS information provided in Appendix A lists the classification for each regulated air pollutant at this facility. This required information is entered into the EPA AIRS database.

4. APPLICATION SCOPE

This PTC is a permit modification to allow for the construction of a new drum mix dryer that is rated at 400 T/hr and replaces the CMI drum mix dryer (rated at 400 T/hr) existed in PTC No. P-040101, issued February 18, 2005. The new drum mix dryer includes a new baghouse. No increase in any emissions will result from the construction of the new drum mix dryer – see Section 5.4 of this statement of basis.

4.1 Application Chronology

December 28, 2006	PTC application was received.
January 26, 2007	Application was determined complete.
February 6, 2007	Additional information was received via email.

5. PERMIT ANALYSIS

This section of the Statement of Basis describes the regulatory requirements for this PTC action:

5.1 *Equipment Listing*

Hot-mix Asphalt Plant

Type of HMA plant: Drum mix

Maximum hot-mix asphalt production rate: 400 T/hr

HMA burner fuel type: Natural gas, propane, ASTM Grade 2 fuel oil, or used oil

Maximum rated heat input capacity: 120 million British thermal units per hour (MMBtu/hr)

Baghouse

Manufacturer: NA

The original PTC (issued on 2/28/05) added equipment that is associated with the use of RAP in the HMA plant process, including an additional four bins, a lump breaker, and two conveyors. For this permit only the hot mix drum dryer and the baghouse have been replaced with new equipment.

5.2 *Emissions Inventory*

No increase in emissions resulted from the replacement of the drum mix dryer and the baghouse. Thus, an emission inventory is not applicable for this project.

5.3 *Modeling*

Modeling is not required for this project. Refer to Appendix B of this statement of basis for an email from Kevin Schilling, DEQ's Modeling Coordinator, regarding modeling for this project.

5.4 *Regulatory Review*

This section describes the regulatory analysis of the applicable air quality rules with respect to this PTC.

IDAPA 58.01.01.006.55.....Modification

This PTC is to allow for the construction of a new drum mix dryer that is rated at 400 T/hr and replaces the CMI drum mix dryer (rated at 400 T/hr) which existed in PTC No. P-040101, issued February 18, 2005. IDAPA 58.01.01.006.55 defines modification as follows: "any physical change in, or change in the method of operation of a stationary source or facility which results in an emission increase as defined in IDAPA 58.01.01.007.05 or which results in the emission of any regulated air pollutant not previously permitted."

IDAPA 58.01.01.007.05 (Emissions Increase) is the amount by which projected actual emissions exceed baseline actual emissions of an emissions unit. Because the proposed drum mix dryer is a new emissions unit, the baseline actual emissions for the unit is equal to zero (0), per IDAPA 58.01.01.007.03.c. The projected actual emissions are greater than zero and greater than exemption criteria (IDAPA 58.01.01.221.01); therefore a PTC is required. However, the applicant has not requested an emissions increase greater than that allowed by the existing permit. DEQ will not authorize an emissions increase in this modified permit. Consequently, an opportunity for public comment is not required pursuant to IDAPA 58.01.01.209.04.

IDAPA 58.01.01.201.....Permit to Construct Required

The facility's proposed project does not meet the permit to construct exemption criteria contained in Sections 220 through 223 of the Rules. Therefore, a PTC is required.

IDAPA 58.01.01.203.....Permit Requirements for New and Modified Stationary Sources

The applicant has shown to the satisfaction of DEQ that the facility will comply with all applicable emissions standards, ambient air quality standards, and toxic increments.

5.5 Permit Conditions Review

No permit conditions are changed from the original PTC No.P-040101, issued February 18, 2005. However, since the drum mix dryer is a new source the permittee is required in this permit to conduct a performance test on the source to measure PM emissions to demonstrate compliance with Permit Condition 2.3 and to meet the NSPS requirements, as specified in 40 CFR Part 60.92. It should be noted that the most updated PTC's General Provisions is included for this permit.

6. PERMIT FEES

The application fees of \$1,000.00 were received on December 28, 2006. In accordance with IDAPA 58.01.01.225, a minimum processing fees of \$500.00 is applicable to this project. The processing fees were received on March 6, 2007.

7. PERMIT REVIEW

7.1 Regional Review of Draft Permit

The draft permit was made available for DEQ's Coeur d'Alene regional office review on February 16, 2007. No comments were received.

7.2 Facility Review of Draft Permit

Interstate was provided the draft permit for review on February 21, 2007. No comments were received.

7.3 Public Comment

This modification revises the facility's existing permit to reflect the construction of a new drum mix dryer, but does not authorize an emissions increase. Therefore, an opportunity for public comment is not required, pursuant to IDAPA 58.01.01.209.04.

8. RECOMMENDATION

Based on review of application materials, and all applicable state and federal rules and regulations, staff recommends that Interstate Concrete and Asphalt Company be issued final PTC No. P-060067 to allow for the construction of a new hot mix drum dryer and the baghouse. No public comment period is recommended, no entity has requested a comment period, and the project does not involve PSD requirements.

HE/bf Permit No. P-060067

Appendix A

AIRS Information

P-060067

AIRS/AFS^a FACILITY-WIDE CLASSIFICATION^b DATA ENTRY FORM

Facility Name: Interstate Concrete and Asphalt Company
Facility Location: Rathdrum
AIRS Number: 055-00048

AIR PROGRAM POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	SM80	TITLE V	AREA CLASSIFICATION A-Attainment U-Unclassified N- Nonattainment
SO ₂	B							U
NO _x	B							U
CO	SM						SM80	U
PM ₁₀	B							U
PT (Particulate)	B							
VOC	B							U
THAP (Total HAPs)	B							
APPLICABLE SUBPART								
I								

^a Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)

^b AIRS/AFS Classification Codes:

- A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For HAPs only, class "A" is applied to each pollutant which is at or above the 10 T/yr threshold, **or** each pollutant that is below the 10 T/yr threshold, but contributes to a plant total in excess of 25 T/yr of all HAPs.
- SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.
- B = Actual and potential emissions below all applicable major source thresholds.
- C = Class is unknown.
- ND = Major source thresholds are not defined (e.g., radionuclides)

Appendix B

Modeling Review

P-060067

From: Kevin Schilling
Sent: Tuesday, February 06, 2007 8:36 PM
To: Mark Peterson
Cc: Corky Witherwax; Harbi Elshafei; William Rogers
Subject: RE: Aermod Project?

Mark,

As I understand it, this asphalt plant was previously permitted for operations at 400 ton/hr. Also, the proposed permitting action is a permit revision, not a modification as per Idaho rules. Since the equipment configuration and stack parameters for the new equipment is nearly identical to the existing HMA, additional dispersion modeling analyses are not needed to demonstrate compliance with applicable standards.

If stack parameters or other equipment characteristics change such that previous modeling analyses do not accurately represent current configurations, additional dispersion modeling should be performed and assessed by the applicant. Such modeling files and results should be kept on file by the applicant, and this documentation should be made available to DEQ upon request if it is determined an ambient air analysis is necessary for the revised equipment configuration.

Please submit this email correspondence with the permit revision request as verification that a revised air impact assessment is not required.

If you have any additional comments or questions regarding dispersion modeling requirements, please contact me.

Thank you,

Kevin Schilling
Stationary Source Modeling Coordinator
Idaho Department of Environmental Quality
208 373-0112

From: Mark Peterson [mailto:mark@aspence.net]
Sent: Tue 2/6/2007 3:54 PM
To: Kevin Schilling
Cc: Corky Witherwax
Subject: RE: Aermod Project?

Kevin,

Interstate Concrete and Asphalt Company (Interstate) has requested a permit revision to allow like kind replacement of the asphalt plant dryer and baghouse regardless of manufacturer for their asphalt plant located in Rathdrum known as the Wyoming Plant. Interstate is not seeking a production increase with this request, only flexibility. The Wyoming Plant is currently permitted for a 400 ton of HMA / hr drum mix asphalt plant. Interstate is proposing to install a new 400 ton of HMA / hr drum mix asphalt plant.

We are requesting clarification on the need for air dispersion modeling since the air emissions should remain the same.

Thank you,

Mark C. Peterson, P.E.

Aspen Consulting & Engineering, Inc.

PTC Statement of Basis – Interstate Concrete and Asphalt Company, Rathdrum