



**Air Quality Permitting
Statement of Basis**

July 11, 2006

**Tier II Operating Permit
No. T2-060307**

Jack B. Parson Companies, Soda Springs

Facility ID No. 029-00009

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FACILITY DRAFT

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Acronyms, Units, and Chemical Nomenclature

acfm	actual cubic feet per minute
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
CO	carbon monoxide
cy	cubic yard
DEQ	Department of Environmental Quality
EPA	Environmental Protection Agency
HAPs	Hazardous Air Pollutants
HMA	Hot Mix Asphalt
IDAPA	A numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
m	meter(s)
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
O ₃	ozone
PM	Particulate Matter
PM ₁₀	Particulate Matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PTE	Potential to Emit
Rules	Rules for the Control of Air Pollution in Idaho
SO ₂	sulfur dioxide
SO _x	sulfur oxides
µg/m ³	micrograms per cubic meter
UTM	Universal Transverse Mercator
VOC	volatile organic compound

1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.400 through 410, Rules for the Control of Air Pollution in Idaho (Rules), for issuing Tier II operating permits (Tier II).

2. FACILITY DESCRIPTION

Concrete is produced by combining water, sand, gravel, and Portland cement. A portable concrete batch plant consists of storage bins for the sand and gravel, a storage silo for the cement, weigh bins that weigh each component, a conveyor, a water supply, and a control panel.

Sand and gravel are either produced on site or purchased elsewhere. Typically, three or four different mixes of gravel and one or two different sizes of sand are stockpiled for various job specifications.

Cement is delivered by truck and pneumatically transferred to its storage silo. A baghouse is mounted above the silo to capture cement as air is displaced in the silo. For this source category, the baghouse is considered process equipment primarily, and air pollution control equipment secondarily.

Power to run the facility is provided by the local utility.

After all the storage bins are filled, the production process begins when sand and gravel are drop-fed into their respective weigh bins. A pre-determined amount of sand and gravel is weighed and drop-fed onto an inclined conveyor, which transfers the mixture into a cement truck. A pre-determined amount of cement is also weighed and drop-fed through a rubber chute into the cement truck, the rubber chute directing the cement and providing a measure of dust control. Sometimes, a separate baghouse is used to capture cement dust from the cement weigh bin. Water is then added, and the components are mixed in the truck on the way to the job site.

3. FACILITY / AREA CLASSIFICATION

Jack B. Parson Companies is classified as a minor facility because the facilities potential to emit is less than major source thresholds without requiring limits on its potential to emit. The AIRS classification is "B".

The facility is located within AQCR 61 and UTM zone 12. The facility is located in Caribou County which is designated as attainment or unclassifiable for all regulated criteria pollutants (PM₁₀, CO, NO_x, SO₂, lead, and ozone).

The AIRS information provided in Appendix A defines the classification for each regulated air pollutant at Jack B. Parson Companies. This required information is entered into the EPA AIRS database.

4. APPLICATION SCOPE

On February 27, 2006, DEQ received a request to renew the Tier II permit, which expired on March 5, 2006.

The process parameters and company information have not changed since the initial issuance of the permit.

4.1 *Application Chronology*

February 27, 2006	DEQ received Tier II Renewal Request.
May 31, 2006	DEQ sent a certification request.

5. PERMIT ANALYSIS

This section of the Statement of Basis describes the regulatory requirements for this Tier II permit.

5.1 Equipment Listing

Portable Concrete Batch Plant

Manufacturer -	Johnson
Model -	ND5yrd
Maximum Capacity (cy/hr) -	60

Cement Storage Silo Baghouse

Stack Height (ft) -	35.0
Stack Diameter (ft) -	2.44 (effective)
Exit Air Flow rate (acfm) -	400
Capture Efficiency -	99.9%

5.2 Emissions Inventory

There is no increase in emissions associated with this permit revision; therefore, a new emissions inventory is not required.

5.3 Modeling

There is no increase in emissions associated with this permit revision; therefore, modeling is not required.

5.4 Regulatory Review

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

Renewal of this permit does not change the applicability of the regulations of the original Tier II operating permit issued March 5, 2001. This permit renewal is, in addition, subject to IDAPA 58.01.01.404.04, *Permit Revision or Renewal*.

5.5 Fee Review

A Tier II operating permit processing fee of \$1,250.00 is required for this permit renewal in accordance with IDAPA 58.01.01.407.

Table 5.1 Tier II Processing Fee Summary

Emissions Inventory	
Pollutant	Permitted Emissions
NO _x	0.0
SO ₂	0.0
CO	0.0
PM ₁₀	0.4
VOC	0.0
TAPS/HAPS	0.0
Total:	0.0
Fee Due	\$ 1,250.00

5.6 Facility Review of Draft Permit

The draft permit was made available for the permittee to review on June 9, 2006. No comments were received.

6. PERMIT CONDITIONS

This section summarizes the changes made to the Tier II operating permit, which was updated to address the fact that the concrete batch plant is portable. The new permit adds permit conditions for when the concrete batch plant is located in an attainment or unclassifiable area and possibly collocated with a portable rock-crushing plant, a portable HMA plant, or another portable concrete batch plant that has also been permitted to specifically allow collocation.

The following permit conditions were renumbered due to formatting changes:

Permit Condition	Original Permit Condition	New Permit Condition
Opacity Limit	1.1	2.1
Reasonable Control of Fugitive Emissions	1.3	2.2
Fugitive Dust Control Plan	1.4	2.4
Operations and Maintenance Manual Requirements	1.5	2.3
Facility Throughput Limits	1.8	3.1
Generator Hours of Operation	1.9	3.2
Operating Parameters	1.10	2.5
Reasonable Control Measures	1.11	2.6
Certification of Documents	1.12	2.9

Permit Conditions 1.1 and 1.2

Permit conditions 1.1 and 1.2 renew the facility's existing permit, which expired on March 5, 2006, and which specifies that this permit replaces Tier II Operating Permit No. 029-00009, issued on March 5, 2001. The terms and conditions of permit no. 029-00009 no longer apply.

Permit Condition 2.3

The following language was added to the existing Operations and Maintenance Manual Requirements: *"The manual shall contain, at a minimum, requirements for monthly inspections of the baghouse during each month of operation. The inspections shall include but not be limited to checking the bags for structural integrity and that they are appropriately secured in place."*

Monthly inspections of the baghouse were added to replace the previous requirement to monitor the pressure drop across the air pollution control device. Permit conditions 1.6 (Monitoring Equipment) and 1.7 (Pressure Drop Across Air Pollution Control Device) from the original permit were deleted. Monthly inspections of the baghouse are considered to be an effective way to ensure that the baghouse is functioning properly.

Permit Condition 2.4

Permit condition 1.4 in the original permit was replaced by permit condition 2.4, which specifies when control of fugitive emissions must occur. Previously, this condition required the permittee to have a fugitive dust control plan that identified all areas of operations where fugitive dust may be generated and the control methods that would be used to control fugitive emissions generated from these areas. The new permit conditions specify the common areas of operation of a portable concrete batch plant that create fugitive dust and when a strategy (or strategies) shall be implemented to control fugitive dust.

Permit Condition 2.5

Permit condition 1.10 (Operating Parameters) was replaced by permit condition 2.5 to remove the requirement to monitor and record the pressure drop across the air pollution control device during each loading of the cement silo.

Permit Condition 2.6

Permit condition 1.11 was replaced by permit condition 2.6. The new requirement implements facility-wide monthly inspections of potential sources of fugitive emissions to ensure that the methods used to reasonably control fugitive emissions are effective. This permit condition replaces the requirement to monitor and record in a log, during operation, the periodic method(s) used to reasonably control fugitive emissions from the facility.

Permit Condition 2.7

The added permit condition addresses relocation of the portable concrete batch plant. All portable equipment shall be registered and DEQ must be notified at least 10 days prior to relocation of any equipment covered by the permit.

Permit Condition 4

The facility is not permitted to operate in a PM₁₀ nonattainment area.

7. PUBLIC COMMENT

In accordance with IDAPA 58.01.01.404.04, no public comment period was provided for the renewed Tier II permit, as there was no increase in allowable emissions.

8. RECOMMENDATION

Based on the review of the application materials, and all applicable state and federal regulations, staff recommends that DEQ issue a final Tier II operating permit to Jack B. Parsons Company.

SC/bf Permit No. T2-060307

Appendix A

AIRS Information

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

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

* 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 NESHAP only, class "A" is applied to each pollutant which is below the 10 ton-per-year (T/yr) threshold, but which contributes to a plant total in excess of 25 T/yr of all NESHAP pollutants.
- 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).