Air Quality Permitting
Statement of Basis

February 2, 2006

Permit to Construct
No. P-030301

Soda Springs Phosphate, Inc., Soda Springs
Facility ID No. 029-00008

Prepared by:
Ken Hanna, Permit Writer
AIR QUALITY DIVISION

Final
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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

Btu

British thermal unit

CFR

Code of Federal Regulations

CO

carbon monoxide

DEQ

Department of Environmental Quality

dscf

dry standard cubic feet

EPA

Environmental Protection Agency

gr

grain (1 lb = 7,000 grains)

gpdscf

gains per dry standard cubic feet

HAPs

Hazardous Air Pollutants

Hg

mercury

IDAPA

A numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act

lb

pound

lb/hr

pound per hour

MMBtu

Million British thermal units

NESHAP

Nation Emission Standards for Hazardous Air Pollutants

NOx

nitrogen oxides

NSPS

New Source Performance Standards

O&M

operations and maintenance manual

PM

Particulate Matter

PM10

Particulate Matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers

PTC

Permit to Construct

Rules

Rules for the Control of Air Pollution in Idaho

SM

synthetic minor

SO2

sulfur dioxide

TPY

tons per year

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**

Soda Springs Phosphate, Inc. is a phosphate granulation facility which produces two types of fertilizer. One is phosphate based and the other is gypsum based. The facility prepares raw material (powdered phosphate ore or gypsum) by mixing it in a pug mill with a binder material (e.g., lignosulfonate molasses). The mixed material then is processed in a granulator, dryer, dryer belt, and a cooler, followed by final product screening/sizing, storage, bagging and load-out. The emissions sources of the facility are primarily PM/PM_{10}, with a small amount of NO_x, CO, SO_2 and VOC from natural gas combustion in the dryer.

3. **FACILITY / AREA CLASSIFICATION**

Soda Springs Phosphate is defined as a synthetic minor facility and the AIRS classification is “SM” because, without permit limits on the potential to emit, the PM/PM_{10} emissions would exceed 100 tons per year. For AIRS purposes, Soda Springs Phosphate is not in the “SM-80” category because the potential to emit PM/PM_{10} is limited to less than 80% of the major source level. The facility is not a designated facility and PSD does not apply.

Soda Springs Phosphate is located within AQCR 61 and UTM zone 11. The facility is located in Caribou County which is designated as unclassifiable for all criteria pollutants (CO, NO_x, PM_{10}, SO_2, lead, and ozone). The AIRS facility classification form is included in the Appendix of this document.

4. **APPLICATION SCOPE**

Soda Springs Phosphate has applied for changes to the existing Tier II operating permit as required by the Consent Order signed by DEQ on August 22, 2002. This modification addresses the following changes:

- Address the change of ownership;
- Increase allowable production input capacity to 25 tons/hr;
- Add a requirement to install, maintain and operate a baghouse for PM control;
- Address Consent Order requirements; and
- Add Operations and Maintenance (O & M) Manual requirements to the permit.

4.1 **Application Chronology**

- **February 19, 2003** DEQ received the permit modification request
- **February 18, 2004** DEQ received a request to change the testing frequency
- **June 30, 2004** DEQ requested additional application information
- **September 9, 2004** DEQ received a change of ownership certification and application materials
- **November 16, 2004** DEQ received a request to increase allowable production to 25 tons/hr
- **May 12, 2005** DEQ received additional application information
August 23, 2005  A draft permit was issued to Soda Springs Phosphate for review
December 27, 2005 The 30-day public comment period for the proposed permit ended.

5. PERMIT ANALYSIS

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

5.1 Equipment/Process Listing

Soda Springs Phosphate is a phosphate granulation facility which granulates raw material (powdered phosphate ore or gypsum) by mixing it with a binder material (lignosulfonate molasses). Raw material is delivered to the facility by dump trucks. Raw material is transferred from stockpiles by a front-end loader to the feed shaker screen that leads to the feeder belt, the feeder bin, the pan feeder, the feed belt, and then to the pug mill. Lignosulfonate is delivered by cars where it is pumped to a storage tank. Lignosulfonate is mixed with water in the mix tank to form a binder which is pumped to the pug mill where it is milled with the raw material. The product then goes to a granulator, a dryer, dryer belt, then to the cooler.

Product from the dryer/cooler is transferred to the cooler discharge belt, the cooler extension belt, and then to a set of three screens: the Rotex screen, the hammer screen and the mini product screen. Oversize product is transferred to the oversize belt which leads to the hammer mill. Products from the screens are transferred to the product storage via the product belt and the mini product belt. The fines are recycled to the feed belt through the fines return belt. Loading of the product is made by a front-end loader that transfers the product to the load out shaker, the load out belt, then to trucks or train cars. Product is also packaged using the bagging system which was previously installed under a PTC exemption. Products from the hammer mill pass through a multiclone that leads to the cooler.

Emissions from the dryer and the cooler flow through two dry cyclones prior to entering the new baghouse emissions control system. For permitting purposes, the cyclones are considered to be process equipment, not control equipment. There is one cyclone on the dryer and one on the cooler. The material collected by the cyclones is collected in boxes and fed back to the process with the raw ore. These boxes are enclosed to minimize the fugitive dust generated by the dust discharge from the cyclone and handling with the front-end loader.

The baghouse is manufactured by Pangborn and the model number is 285HP1015TS. It has an air to cloth ratio of 5.8:1 and the following stack parameters: vertical, uncovered; 35ft high; 4ft diameter; 22,000 acfm exit flow rate; and 160°F exit temperature.

5.2 Emissions Inventory

PM emissions, opacity and odor from the facility are reduced as a result of the changes addressed in this permit. This is the result of replacing the dryer’s wet scrubbing emissions control system with the new baghouse system. The existing PM/PM<sub>10</sub> permit limits are 7.0 lb/hr and 30.7 tons per year (TPY), and estimated emissions with the new baghouse are 2.63 lb/hr and 11.5 TPY. This results in an emissions reduction of 4.4 lbs/hr and 19.2 TPY. On September 17, 2004, a performance test was conducted with the new dryer baghouse in place, and the results were 0.5 lb/hr of PM/PM<sub>10</sub> from the new dryer baghouse stack as presented in the letter from DEQ to Soda Springs Phosphate dated January 21, 2005.
Estimated PM/PM$_{10}$ emissions from the facility following this modification are given in Table 5.1. The dryer and bagging system estimates are based on the new information provided and reviewed as part of the application. Emissions from other sources were estimated using the estimate information in the August 7, 2000 permit analysis (i.e., the previous permit), plus consideration of the increased allowable feed to the dryer from 12.2 tons/hr to 25 tons/hr. An example calculation is provided as follows:

\[ \text{Screening, Conveying and Milling PM} = \frac{25}{12.2}(2.437 \text{ lb/hr}) = 5.0 \text{ lb/hr} \]

<table>
<thead>
<tr>
<th>Source</th>
<th>PM</th>
<th>PM$_{10}$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lb/hr</td>
<td>tons/yr</td>
</tr>
<tr>
<td>Dryer</td>
<td>2.6</td>
<td>11.5</td>
</tr>
<tr>
<td>Screening, Conveying, and Milling</td>
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<tr>
<td>Bagging System</td>
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<td>2.6</td>
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<tr>
<td>Point Source Total</td>
<td>---</td>
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<tr>
<td>Ore Unloading, Piling Stockpiles and Feeding</td>
<td>2.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Product Loading</td>
<td>1.2</td>
<td>5.3</td>
</tr>
<tr>
<td>Fugitive Source Total</td>
<td>---</td>
<td>8.9</td>
</tr>
</tbody>
</table>

5.3 Modeling

Dispersion modeling was performed for the existing Tier II permit. The permit was issued under the statement that the modeling demonstrated, to the satisfaction of DEQ emissions from the facility will not cause or significantly contribute to a violation of an air quality standard.

The proposed action results in a net emission reduction of PM$_{10}$.

DEQ did not reevaluate NAAQS compliance for reissuance of this PTC.

5.4 Regulatory Review

This section describes the regulatory analysis of the applicable air quality rules and requirements.

Facility-wide Requirements

IDAPA 58.01.01.650-651............... Fugitive Particulate Matter

Permit Condition 2.1 states that all reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651.

Compliance Demonstration

Compliance is demonstrated by following the requirements in Permit Conditions 2.1 through 2.4. Condition 2.2 states that the permittee is required to monitor and maintain records of the frequency and the methods used by the facility to reasonably control fugitive particulate emissions. IDAPA 58.01.01.651 gives some examples of ways to reasonably control fugitive emissions which include using water or chemicals, applying dust suppressants, using control equipment, covering trucks, paving roads or parking areas, and removing materials from streets.
Permit Condition 2.3 requires that the permittee maintain a record of all fugitive dust complaints received. In addition, the permittee is required to take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The permittee is also required to maintain records that include the date that each complaint was received and a description of the complaint, the permittee’s assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

To ensure that the methods being used by the permittee to reasonably control fugitive PM emissions whether or not a complaint is received, Permit Condition 2.4 requires that the permittee conduct periodic inspections of the facility. The permittee is required to inspect potential sources of fugitive emissions during daylight hours and under normal operating conditions. If the permittee determines that the fugitive emissions are not being reasonably controlled the permittee shall take corrective action as expeditiously as practicable. The permittee is also required to maintain records of the results of each fugitive emission inspection.

Both Permit Conditions 2.3 and 2.4 require the permittee to take corrective action as expeditiously as practicable. In general, DEQ believes that taking corrective action within 24 hours of receiving a valid complaint or determining that fugitive particulate emissions are not being reasonably controlled meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

IDAPA 58.01.01.775-776................. Control of Odors

Permit Condition 2.5 and IDAPA 58.01.01.776 both state that: “No person shall allow, suffer, cause or permit the emission of odorous gases, liquids or solids to the atmosphere in such quantities as to cause air pollution.” This condition is currently considered federally enforceable until such time it is removed from the SIP, at which time it will be a state-only enforceable requirement.

The compliance demonstration is addressed in Permit Conditions 2.6 and 2.7. Permit Condition 2.6 requires the permittee to maintain records of all odor complaints received. If the complaint has merit, the permittee is required to take appropriate corrective action as expeditiously as practicable. The records are required to contain the date that each complaint was received and a description of the complaint, the permittee’s assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

Permit Condition 2.6 also requires the permittee to take corrective action as expeditiously as practicable. In general, DEQ believes that taking corrective action within 24 hours of receiving a valid odor complaint meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

Permit Condition 2.7 requires the permittee to develop and implement procedures to manage odors from the facility as part of the facility’s O&M Manual. In the event that DEQ receives any odor complaints, they may be resolved as set forth in the “Department of Environmental Quality’s Policy for Responding to Odor Complaints.” These procedures specify the process DEQ will follow to resolve odor complaints received by DEQ and to ensure compliance with existing regulations. These procedures also ensure odor complaints are referred to the appropriate public entity for action. These procedures address odor complaints with appropriate and increasing DEQ intervention up to and including the filing of a civil action in appropriate circumstances. A copy of this policy and general information regarding odor management are available on DEQ’s website at:

http://www.deq.state.id.us/policies/pm00_6odor.htm
http://www.deq.state.id.us/air/monitoring/odors.htm
Visible Emissions

IDAPA 58.01.01.625 and Permit Condition 2.8 state that "(No) person shall discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than twenty percent (20%) opacity as determined..." by IDAPA 58.01.01.625. This provision does not apply when the presence of uncombined water, NOx, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this rule. All point sources, including PTC exempt sources such as the Bagging System stack, are subject to this provision.

Compliance is demonstrated by following the requirements in Condition 2.9. To ensure reasonable compliance with the visible emissions rule, Condition 2.9 requires that the permittee conduct routine visible emissions inspections of the facility. The permittee is required to periodically inspect potential sources of visible emissions, during daylight hours and under normal operating conditions. The visible emissions inspection consists of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emission covered by this section, the permittee must either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is determined to be greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee must take corrective action and report the exceedance in its annual compliance certification and in accordance with the excess emissions rules in IDAPA 58.01.01.130-136. The permittee is also required to maintain records of the results of each visible emissions inspection and each opacity test when conducted. These records must include the date of each inspection, a description of the permittee’s assessment of the conditions existing at the time visible emissions are present, any corrective action taken in response to the visible emissions, and the date corrective action was taken.

Permit Condition 2.9 requires the permittee to take corrective action as expeditiously as practicable. In general, DEQ believes that taking corrective action within 24 hours of discovering visible emissions meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

Excess Emissions

IDAPA 58.01.01.130-136................. Excess Emissions

Permit Condition 2.10 requires the permittee to comply with the requirements of IDAPA 58.01.01.130-136 for emissions that exceed permit limits as a result of startup, shutdown, scheduled maintenance, safety measures, upset, and breakdowns. Compliance is demonstrated by following the requirements of IDAPA 58.01.01.130-136.

Open Burning

IDAPA 58.01.01.600-616............... Open Burning

All open burning shall be done in accordance with IDAPA 58.01.01.600-616.

Performance Testing

IDAPA 58.01.01.157..................... Performance Testing

Standard testing and reporting requirements have been included in this section of the permit.

Monitoring and Recordkeeping

The permittee is required to maintain recorded data in an appropriate location for a period of at least two years.

Reports and Certifications

All reports required by the permit shall be certified by a responsible official in accordance with IDAPA 58.01.01.123.
Compliance with this requirement for natural gas combustion in the granulation process dryer is given as follows. It is reasonable to assume that compliance with the particulate matter standard is assured provided that only natural gas is combusted, and the dryer burner assembly is maintained in good working order and operated per manufacturer recommendations. According to AP-42, Section 1.4, July 1998, the burner would emit 7.6 pounds of particulate per million cubic feet of natural gas combusted. Also, according to 40 CFR 60, Appendix A, Method 19, Table 19-1, approximately 8,710 dscf of flue gas at standard conditions (68° F, 29.92 inches of Hg) is created per million British thermal units (MMBtu) of natural gas. This data is used in the following steps to demonstrate that particulate emissions from the combustion of natural gas will not exceed the particulate matter standard of 0.015 gr/dscf.

Correct the flue gas volume as follows:

1) Altitude correction, IDAPA 58.01.01.680. (The facility altitude is 6,000 feet).

   Subtract 0.10 x 60.0 = 6.00 inches Hg from standard atmospheric pressure at sea level.
   29.92 inches Hg – 6.00 inches Hg = 23.92 inches Hg

2) Using the Ideal Gas Law and knowing that n, R, and T will be the same,

\[ V_2 = \frac{P_1 V_1}{P_2} \]  \hspace{1cm} (5.1)

where,

- \( V_2 \) = the gas volume corrected for altitude,
- \( V_1 \) = the known gas volume (8,710 dscf),
- \( P_1 \) = the pressure of the known gas volume (29.92 inches Hg)
- \( P_2 \) = the pressure of the corrected gas volume (23.92 inches Hg).

The altitude corrected volume \( (V_2) \) of the flue gas is 10,890 dscf.

For 3% oxygen:

Using a standard correction ratio as presented in 40 CFR 60, Appendix A, Method 19,

\[ F_2 = F_1 \times \frac{20.9}{20.9 - 3.0} \]  \hspace{1cm} (5.2)

where,

- \( F_2 \) = the gas volume corrected to 3% oxygen,
- \( F_1 \) = the altitude corrected flue gas volume (10,890 dscf) as calculated in Equation 5.1.

The oxygen and altitude corrected volume \( (F_2) \) of the flue gas is 12,720 dscf per MMBtu of natural gas.

3) Determine the volume of flue gas created by the combustion of one million cubic feet of natural gas as follows:

\[ 10^6 \text{ feet}^3 \times 1,050 \text{ Btu/feet}^3 \times 12,720 \text{ dscf} / 10^6 \text{ Btu} = 13.4 \times 10^6 \text{ dscf} \]  \hspace{1cm} (5.3)
4) Determine the grain loading per cubic foot of flue gas as follows:

\[
7.6 \text{ lb PM} \times 7,000 \text{ gr/lb} \div 13.4 \times 10^6 \text{ dscf} = 0.0040 \text{ gr/dscf} < 0.015 \text{ gr/dscf}
\]

(5.4)

Emissions factors given in AP-42 are generally accepted as conservative estimates. Even a conservative estimate of emissions from natural gas combustion results in an approximated grain loading well below the standard of 0.015 gr/dscf. Therefore, as long as the permittee complies with the permit condition requiring the exclusive use of natural gas, compliance with the grain-loading standard is assured.

**Other Permit Requirements**

IDAPA 58.01.01.201, 404............................... PTC and Tier II Permit Requirements

This permit is being issued as a PTC instead of as a revised/renewed Tier II permit. It is a PTC because it addresses a physical modification for the dryer emission control system change, an operational modification for increasing the dryer throughput, and it includes a facility-wide evaluation of emission changes resulting from the modifications. Requirements associated with the Settlement Agreement signed by DEQ on April 21, 2000 and the Consent Order signed by DEQ on August 22, 2002 have been reviewed and permit conditions to address them have been included into the permit as part of this action. It is noted that Soda Springs Phosphate submitted the application for this permit to address requirement 16 of the August 22, 2002 Consent Order. With regard to the Settlement agreement, issues concerning visible emissions from the drying system stack, fugitive dust control records, maximum allowable fertilizer production rate, emission control system parameter monitoring, and odor emissions have been addressed by this permit modification, and details are provided below.

IDAPA 58.01.01.701................................. PM Process Weight Limitations

As described in PTC No. 0420-0008-050, issued on August 28, 1986, and as specified in the current version of the process weight rate rule, emissions from the granulation system shall not exceed "E", in pounds per hour where PW is the process weight in pounds per hour, per the following equation:

\[
E = 0.045(PW)^{0.60} \text{ if PW is less than 9250 lb/hr}
E = 0.045(9249 \text{ lb/hr})^{0.60} = 10.8 \text{ lb/hr}
\]

\[
E = 1.10(PW)^{0.25} \text{ if PW is equal to or greater than 9250 lb/hr}
E = 1.10(36,000 \text{ lb/hr})^{0.25} = 15.2 \text{ lb/hr}
\]

Compliance with this requirement is demonstrated by complying with the emission rate limit of 2.63 pounds per hour which is specified in the permit.

**5.5 Fee Review**

A PTC application fee of $1000 was received on January 25, 2006, and a PTC processing fee of $5,000 was received on December 20, 2005, per IDAPA 58.01.01.224-225. The fee is based on the facility’s permitted emissions, excluding fugitive emissions, which are between 10 and 100 tons per year.
Table 5.2 PROCESSING FEE SUMMARY

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Permitted Emissions</th>
</tr>
</thead>
<tbody>
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<td>NOₓ</td>
<td>5.4</td>
</tr>
<tr>
<td>SO₂</td>
<td>0.03</td>
</tr>
<tr>
<td>CO</td>
<td>1.1</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>22</td>
</tr>
<tr>
<td>VOC</td>
<td>0.3</td>
</tr>
<tr>
<td>TAPS/HAPS</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
</tr>
<tr>
<td>Fee Due</td>
<td>$5,000.00</td>
</tr>
</tbody>
</table>

5.6 Regional Review of Draft Permit

On November 3, 2005, the draft permit was made available to the Pocatello Regional Office for review. No changes were requested.

5.7 Facility Draft review of Draft Permit

On August 23, 2005, the draft permit was made available to Soda Springs Phosphate for review. It was requested that the requirement in Permit Condition 3.9 to write the O & M Manual in Spanish be deleted. DEQ concurs this is no longer necessary and that the change was made. The requirements/intent of item No. 17 of the August 26, 2002 Consent Order are still met.

6. PERMIT CONDITIONS

This section summarizes and explains the reasoning behind changes to the permit conditions for this facility.

Permit Section 1

The Permit Scope Section was added to the permit to clarify applicability of other permits for this facility and to list sources addressed by the permit.

Permit Section 2

Standard facility-wide requirements which apply to all sources at the facility were consolidated in Section 2 of the permit. This includes applicable requirements, such as the rules for excess emissions, which applied but were not included in the previous permit(s).

Permit Condition 3.1, 3.2 and 4.1

Descriptions of the emissions sources and emissions controls were added to the permit.

Permit Condition 3.3

Estimated PM/PM₁₀ emissions from the dryer with the new baghouse system are 2.63 lb/hr and 11.5 TPY. These emissions rates are representative of the modified source and compliance with all applicable requirements has been demonstrated at these rates. Therefore, they are included in the permit as the new emissions limits for this source.

Compliance with this permit condition is demonstrated by performing the operating, monitoring, recordkeeping, testing and training requirements specified in Section 3 of the permit. Monitoring of dryer temperature and scrubber water parameters is no longer necessary or appropriate since the wet scrubber has been removed and a baghouse system is now being used to control PM emissions.
Permit Condition 3.3 in the August 21, 2000 Tier II Permit

This permit condition required the facility to conduct a monthly visible emissions evaluation of the wet scrubber stack. This condition was necessary for operation of the wet scrubbing system, but it is not appropriate for the baghouse emissions control system, therefore, it was deleted. It is noted, however, that this issue is still addressed by facility-wide Permit Condition 2.9 which requires a weekly inspection of potential sources of visible emissions at the facility. This includes the dryer baghouse stack as well as all other "point sources" at the facility.

Permit Condition 3.5 and 3.12

The feed material throughput limit was revised to be 600 tons per day which is representative of the level at which the unit was most recently tested. Compliance with all applicable requirements has been demonstrated at this feed rate, and compliance with this feed rate limit is shown by keeping daily records. This rate was determined as follows:

\[(25 \text{ tons/hr}) \times (24 \text{ hr/day}) = 600 \text{ tons/day}\]

Permit Condition 3.6, 3.7 and 3.12

The emissions control system requirements for a wet scrubbing system were replaced by requirements to install, maintain and operate a baghouse to control PM emissions from the dryer. This changed was made to address requirements 9, 10, and 11 of the August 22, 2002 Consent Order. Compliance is demonstrated by following requirements to install pressure drop monitoring equipment for this system and by keeping records to show the pressure drop is maintained within the manufacturer's and O&M manual specifications.

The requirements to monitor wet scrubbing system operating parameters (i.e., scrubbing media flow rate, fresh water flow rate and dryer temperature) were deleted since they are no longer relevant to the current emissions control system. The baghouse system was installed to meet the requirements of the August 22, 2002 Consent Order (instead of using a wet scrubbing system), and it provides superior results with regard to controlling both PM and odor emissions from the facility. These changes were made to address requirements 14 and 15 of the Consent Order.

Permit Condition 3.8

A requirement to combust natural gas exclusively in the dryer was added to the permit to ensure compliance with the fuel burning equipment standards under IDAPA 58.01.01.676-677.

Permit Condition 2.2, 3.9, 3.10 and 3.13

Operation and Maintenance (O&M) Manual and training requirements were added to the permit as part of the operating, monitoring and recordkeeping necessary to ensure facility operations, including operation of the baghouse, are conducted in a manner that is consistent with the information presented in the permit application. This information in the application has been evaluated and found to demonstrate compliance with all applicable requirements.

O&M conditions were also added for purposes of meeting requirement 17 in the August 22, 2002 Consent Order. Since details for fugitive dust control will now be documented in the O&M Manual, the detailed requirements listed in Permit Condition 2.2 are no longer necessary and were deleted. Training requirements were added to the permit's O&M Manual conditions to meet requirement 18 of this Consent Order. The requirement to write the O & M manual in Spanish is not necessary considering the other O & M manual requirement changes. Therefore, this was not included in Permit Condition 3.9.
Permit Condition 3.11

Performance test requirements for PM were revised so that tests are now required once each permit term (i.e., every 5 years) instead of annually. The results of the test conducted on September 17, 2004 were 0.5 lb/hr and 21.4 TPY as indicated in the January 21, 2005 letter from DEQ to Soda Springs Phosphate. Given consideration of the margin of compliance demonstrated with the new baghouse system, and the amount of operating monitoring and recordkeeping included in the revised permit, a five year test frequency is considered adequate for this source. These changes were made to address requirements 12 and 13 of the Consent Order.

Permit Condition 4.2

Emissions limits for Product Screening, Conveying, and Milling were retained in this section since these sources are listed as point sources in the existing permit. The emissions limits were increased to correspond to the increased dryer throughput from 18 to 25 tons/hr (refer to the emissions inventory section). It should be noted that there is an overall net reduction of calculated particulate matter emissions at the facility due to the replacement of a scrubber with a baghouse even though there is an increase of emissions from Product Screening, Conveying, and Milling and an increase in emissions from fugitive sources. Emissions limits for Ore Unloading, Ore Piling, Stockpiles, Ore Feeding and Product Loading were deleted from the permit because these are fugitive emissions sources, and it is not practical to measure actual emissions from these sources. It is noted that fugitive dust emissions are still addressed by the permit; the existing requirement that limits visible emissions from these sources at the facility boundary, Permit Condition 4.3, was not changed.

7. PUBLIC COMMENT

In accordance with IDAPA 58.01.01.209, a public comment period for this permit was conducted from November 28, 2005 through December 27, 2005. No comments were received.

8. RECOMMENDATION

Based on the review of the application materials, and all applicable state and federal regulations, staff recommend that DEQ issue PTC No. P-030301 to Soda Springs Phosphate, Inc. The project does not involve PSD requirements

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Appendix

AIRS Information

P-030301
## AIRS/AFS Facility-Wide Classification Data Entry Form

**Facility Name:** Soda Springs Phosphate, Inc.  
**Facility Location:** Soda Springs, Idaho  
**AIRS Number:** 029-00008

<table>
<thead>
<tr>
<th>AIR PROGRAM</th>
<th>POLLUTANT</th>
<th>SIP</th>
<th>PSD</th>
<th>NSPS (Part 60)</th>
<th>NESHAP (Part 61)</th>
<th>MACT (Part 63)</th>
<th>SM80</th>
<th>TITLE V</th>
<th>AREA CLASSIFICATION</th>
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<td>B</td>
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<tr>
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**APPLICABLE SUBPART**

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\*Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS) \n\*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).