

Statement of Basis

Permit to Construct No. P-2012.0012

Project ID 61435

J R Simplot Company Smoky Canyon Mine

25 Miles East of Soda Springs, Idaho

Facility ID 029-00021

Final

December 18, 2014

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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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ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

Btu	British thermal units
CAA	Clean Air Act
CFR	Code of Federal Regulations
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	CO ₂ equivalent emissions
COMS	continuous opacity monitoring systems
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
HAP	hazardous air pollutants
hp	horsepower
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
MACT	Maximum Achievable Control Technology
MMBtu	million British thermal units
NAAQS	National Ambient Air Quality Standard
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
O ₂	oxygen
PC	permit condition
PM	particulate matter
PM _{2.5}	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
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
PTE	potential to emit
<i>Rules</i>	<i>Rules for the Control of Air Pollution in Idaho</i>
SO ₂	sulfur dioxide
SO _x	sulfur oxides
T/day	tons per calendar day
T/hr	tons per hour
T/yr	tons per consecutive 12 calendar month period
TAP	toxic air pollutants
ULSD	ultra-low sulfur diesel
U.S.C.	United States Code
VOC	volatile organic compounds

FACILITY INFORMATION

Description

JR Simplot Company operates an open pit phosphate mining operation approximately 25 miles east of Soda Springs, Idaho. Operations at the mine primarily consist of mining ore and processing it in a mill in preparation of transporting ore slurry via an 87 mile underground pipeline to Pocatello, Idaho. JR Simplot Company was issued a permit to construct on July 6, 1983 for the surface mining operations and ore handling and slurring processes; the permit also included a 12 MMBtu/hr coal-fired boiler. JR Simplot Company also received a permit by rule on September 13, 2010 for a portable 400 tons per hour rock crushing operation that has been used at the Smoky Canyon Mine.

Permitting History

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).

July 6, 1983	DEQ issued the initial permit to construct for the mine, Permit Status – (S).
May 25, 2012	P-2012.0012, PTC modification to add the 400 ton per hour portable rock crusher and on-board generator to the stationary source permit, and update the fugitive dust control plan requirements, Permit Status – (A), but will become (S) upon issuance of this permit.

Application Scope

This PTC is a revision of an existing permit. The applicant has removed the coal-fired boiler from service and replaced it with an electric boiler.

Application Chronology

October 10, 2014	DEQ received an application and an application fee.
November 4, 2014	DEQ determined that the application was complete.
November 25, 2014	DEQ made available the draft permit and statement of basis for peer and regional office review.
December 8, 2014	DEQ made available the draft permit and statement of basis for applicant review.
October 10, 2014	DEQ received the permit processing fee.
December 18, 2014	DEQ issued the final permit and statement of basis.

TECHNICAL ANALYSIS

Emissions Units and Control Equipment

Table 1 EMISSIONS UNITS AND CONTROL EQUIPMENT INFORMATION

Sources	Control Equipment
<u>Crusher:</u> Manufacturer: unknown Model: 6356-541 Manufacture Date: 2009 Max. production: 400 T/hr	Reasonable control in accordance with IDAPA 58.01.01.650
<u>Screens(2):</u> Manufacturer(s): unknown Serial No.: 3620-130 & 4156-546 Manufacture Date: 2010 Max. production: 400 T/hr	
<u>Generator</u> Manufacturer: Caterpillar Model: Prime 910EKW Fuel: #2 Fuel Oil	None

Emissions Inventories

Since this proposed project is for a revised PTC to discontinue the use of the coal-fired boiler, emissions will not increase as a result of the issuance of this permit. For a complete emission inventory, refer to the Statement of Basis issued May 25, 2012. All emission rates and limits in the existing PTC are carried over with no change in emission rates as a result of this permitting action.

Ambient Air Quality Impact Analyses

Emissions will not increase as a result of this permitting action, thus the ambient air quality impact analysis is not required.

REGULATORY ANALYSIS

Attainment Designation (40 CFR 81.313)

The facility is located in Caribou County, which is designated as attainment or unclassifiable for PM_{2.5}, PM₁₀, SO₂, NO₂, CO, and Ozone. Refer to 40 CFR 81.313 for additional information.

Permit to Construct (IDAPA 58.01.01.201)

IDAPA 58.01.01.201Permit to Construct Required

The permittee has requested that a PTC be issued to the facility for the proposed revision. Therefore, a permit to construct is required to be issued in accordance with IDAPA 58.01.01.220. This permitting action was processed in accordance with the procedures of IDAPA 58.01.01.200-228.

Tier II Operating Permit (IDAPA 58.01.01.401)

IDAPA 58.01.01.401 Tier II Operating Permit

The application was submitted for a permit to construct (refer to the Permit to Construct section), and an optional Tier II operating permit has not been requested. Therefore, the procedures of IDAPA 58.01.01.400–410 were not applicable to this permitting action.

Visible Emissions (IDAPA 58.01.01.625)

IDAPA 58.01.01.625 Visible Emissions

The sources of visible emissions at this facility are subject to the State of Idaho visible emissions standard of 20% opacity.

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

IDAPA 58.01.01.301 Requirement to Obtain Tier I Operating Permit

Post project facility-wide emissions from this facility do not have a potential to emit greater than 100 tons per year for PM10, SO2, NOx, CO, VOC, and HAPs or 10 tons per year for any one HAP or 25 tons per year for all HAPs combined as demonstrated in the previous Statement of Basis issued May 25, 2012. Therefore, the facility is not a Tier I source in accordance with IDAPA 58.01.01.006 and the requirements of IDAPA 58.01.01.301 do not apply.

PSD Classification (40 CFR 52.21)

40 CFR 52.21 Prevention of Significant Deterioration of Air Quality

The facility is not a major stationary source as defined in 40 CFR 52.21(b)(1), nor is it undergoing any physical change at a stationary source not otherwise qualifying under paragraph 40 CFR 52.21(b)(1) as a major stationary source, if the changes would constitute a major stationary source by itself as defined in 40 CFR 52. Therefore in accordance with 40 CFR 52.21(a)(2), PSD requirements are not applicable to this permitting action. The facility is not a designated facility as defined in 40 CFR 52.21(b)(1)(i)(a), and does not have facility-wide emissions of any criteria pollutant that exceed 250 T/yr.

Phosphate rock processing plants are a listed source category in 40 CFR 52.21(b)(1)(i)(a). However, in accordance with EPA’s clarification¹ of what constitutes a phosphate rock processing plant for PSD purposes, the Smoky Canyon Mine and associated mill does not qualify because the facility does not include chemical or fertilizer production processes. Since the facility is not a designated facility, fugitive emissions do not count in determining the facility’s potential to emit [40 CFR 52.21 (b)(1)(iii)].

NSPS Applicability (40 CFR 60)

40 CFR 60, Subpart III Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

This subpart applies to the generator set engine that is associated with the portable crusher. A detailed breakdown of the regulation is provided in the Statement of Basis issued May 25, 2012.

40 CFR 60, Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants

This subpart applies to the portable crusher and associated screens. A detailed breakdown of the regulation is provided in the Statement of Basis issued May 25, 2012. Simplot provided the initial startup notification required by 40 CFR 60.7 on November 10, 2010.

¹ Clarification of Sources Subject to Prevention of Significant Deterioration (PSD) Review, D. Kent Berry, Director, EPA Policy Analysis Staff, January 20, 1976

NESHAP Applicability (40 CFR 61)

The facility is not subject to any NESHAP requirements in 40 CFR 61.

MACT Applicability (40 CFR 63)

40 CFR 63, Subpart ZZZZ.....Area Source Standards for Reciprocating Internal Combustion Engines

The portable generator engine is subject to this subpart because it is located at an area source of HAP emissions. However, in accordance with 40 CFR 63.6590(c) the permittee must comply with this subpart by complying with the provisions of 40 CFR 60 Subpart III.

40 CFR 63, Subpart JJJJJArea Source Standards for Boilers

Subpart JJJJJ is no longer applicable to the facility because of the removal of the coal-fired boiler.

Permit Conditions Review

This section describes the permit conditions that have been added, revised, modified, or deleted as a result of this permitting action. Various permit conditions and references have been renumbered.

Permit Condition 1.4 (list of emission sources)

- The reference to the coal-fired boiler was removed from the list of emission sources.

Permit Conditions 3.1 through 3.7

- All references and requirements for the coal-fired boiler have been removed from these permit conditions.

Permit Condition 3.6

- Permit condition 3.6 was removed because 40 CFR 63 subpart JJJJJ is no longer applicable due to the removal of the coal-fired boiler.

PUBLIC REVIEW

Public Comment Opportunity

Because this permitting action does not authorize an increase in emissions, an opportunity for public comment period was not required or provided in accordance with IDAPA 58.01.01.209.04 or IDAPA 58.01.01.404.04.

APPENDIX A – FACILITY DRAFT COMMENTS

The following comments were received from the facility on December 10, 2014:

Facility Comment: Section 5.5 and 5.6 discuss requirements related to construction. This permitting action does not involve any construction. Can these sections be removed from the permit to avoid confusion?

DEQ Response: The requirements listed in Section 5 (General Provisions) are standard permit requirements that are included in all PTCs as standard procedure.

APPENDIX B – PROCESSING FEE

PTC Fee Calculation

Instructions:

Fill in the following information and answer the following questions with a Y or N. Enter the emissions increases and decreases for each pollutant in the table.

Company: JR Simplot Company
Address: P.O. Box 1270
City: Afton
State: WY
Zip Code: 83110
Facility Contact: Dustin Hansen
Title: Environmental Engineer
AIRS No.: 029-00021

- N
 Does this facility qualify for a general permit (i.e. concrete batch plant, hot-mix asphalt plant)? Y/N
- N
 Did this permit require engineering analysis? Y/N
- N
 Is this a PSD permit Y/N (IDAPA 58.01.01.205.04)

Emissions Inventory			
Pollutant	Annual Emissions Increase (T/yr)	Annual Emissions Reduction (T/yr)	Annual Emissions Change (T/yr)
NO _x	0.0	0	0.0
SO ₂	0.0	0	0.0
CO	0.0	0	0.0
PM10	0.0	0	0.0
VOC	0.0	0	0.0
TAPS/HAPS	0.0	0	0.0
Total:	0.0	0	0.0
Fee Due	\$ 250.00		

Comments: