STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

TECHNICAL SERVICES OFFICE

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor
C. Stephen Allred, Director

June 13, 2002

CERTIFIED MAIL #7000 1530 0005 5348 5202

Mr. Gary R. Resh
Dry Valley Mine Manager
Astaris Dry Valley Mine
P.O. Box 839
Soda Springs, ID 83276

RE: AIRS Facility No. 029-00027, Astaris Phosphate Ore Mine, Soda Springs
Revised Tier II Operating Permit

Dear Mr. Resh:

The Department of Environmental Quality (Department) is issuing amended Tier II operating permit number 029-00027 for the Astaris Phosphate Ore Mine in Soda Springs, in accordance with IDAPA 58.01.01.400 through 406, *Rules for the Control of Air Pollution in Idaho* (*Rules*).

The enclosed revised Tier II operating permit is based on the information contained in your permit application received by the Department on April 18, 2001. At that time, your application was placed on our backlog queue and was activated on January 24, 2002. This Tier II permit is effective immediately and replaces your previous Tier II permit issued on April 17, 2000.

You, as well as any other entity, may have the right to appeal this final agency action pursuant to IDAPA 58.01.23 *(Rules of Administrative Procedure Before the Board of Environmental Quality)*. A petition may be filed with the Hearings Coordinator, Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255, within 35 days of the date of this decision. However, the Department encourages you to contact us to discuss any concerns you may have with the enclosed permit prior to filing a petition for a contested case.

If you have any questions regarding the terms or conditions of the enclosed permit, please contact Mike Simon at (208) 373-0502 or msimon@deq.state.id.us.

Sincerely,

Katherine B. Kelly
Administrator
Air Quality Division

KK/KB/sm Project No. T2-010307 G:\AIR PERMITS\T 2\ASTARIS\T2-010307 PERMIT LTR.DOC
Enclosure
cc: Tiffany Floyd, Pocatello Regional Office
Kent Berry, EQM
Laurie Kral, EPA Region 10

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Air Quality **TIER II OPERATING PERMIT** **State of Idaho** **Department of Environmental Quality**	**PERMIT NO.:** 029-00027 **AQCR:** 61 **CLASS:** SM **SIC:** 1475 **ZONE:** 12 **UTM COORDINATE (km):** 471.5, 4733.7

1. **PERMITTEE** Astaris Production, LLC			
2. **PROJECT** Dry Valley Mine			
3. **MAILING ADDRESS** P.O. Box 839	**CITY** Soda Springs	**STATE** ID	**ZIP** 83276
4. **FACILITY CONTACT** Gary R. Resh	**TITLE** Dry Valley Mine Manager	**TELEPHONE** (208) 547-2700 Ext. 17	
5. **RESPONSIBLE OFFICIAL** Gary R. Resh	**TITLE** Dry Valley Mine Manager	**TELEPHONE** (208) 547-2700 Ext. 17	
6. **EXACT PLANT LOCATION** Section 31 (T.7S, R.44E), Sec. 6.5, 8, 9, 15, 16, 21, 22, (T.8S, R.44E)		**COUNTY** Caribou	
7. **GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS** Phosphate Ore Mining			

8. **PERMIT AUTHORITY**

This permit is issued according to the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.400, and pertains only to emissions of air contaminants, which are regulated by the state of Idaho and to the sources specifically allowed to be operated by this permit.

This permit has been granted on the basis of design information presented in the application and the Idaho Department of Environmental Quality's (the Department) technical analysis of the supplied information. Changes in design or equipment that result in any change in the nature or amount of emissions may be a modification. Modifications are subject to Department review in accordance with Section 58.01.01.200 of the *Rules for the Control of Air Pollution in Idaho*.

KATHERINE B. KELLY, ADMINISTRATOR, AIR QUALITY DIVISION
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED: June 13, 2002

DATE EXPIRES: June 13, 2007

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LIST OF ACRONYMS

AQCR	Air Quality Control Region
CFR	Code of Federal Regulations
CO	carbon monoxide
Department	Department of Environmental Quality
dscf	dry standard cubic feet
EPA	Environmental Protection Agency
gr	grain (1 lb = 7,000 grains)
IDAPA	A number designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
MMBtu/hr	million British thermal units per hour
NO_X	nitrogen oxides
NSPS	New Source Performance Standards
PM	particulate matter
PM_{10}	particulate matter with an aerodynamic diameter of a nominal 10 micrometers or less
ppm	parts per million
PTC	Permit to Construct
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	sulfur dioxide
UTM	Universal Transverse Mercator
VOC	volatile organic compound

TIER II OPERATING PERMIT SCOPE

Purpose

1.1 The purpose of this Tier II permit is to incorporate previously issued permits for the Dry Valley Mine and to establish enforceable limitations on potential to emit to below major facility thresholds.

1.2 This Tier II permit incorporates the following permits:

- Tier II Operating Permit No. 029-00027, issued April 17, 2000 to Astaris Production LLC.
- Permit to Construct No. 420-00027, issued April 23, 1998 to the FMC Corp.
- Permit to Construct No. 420-00027, issued September ~~15~~ 25, 1991 to the FMC Corp.

Regulated Sources

1.3 Table 1.1 below lists all sources of emissions regulated in this Tier II operating permit.

Table 1.1 EMISSION SOURCES

Permit Section	Source Description	Emissions Control(s)
3	Burnham boiler, model 4FW-277-50-GO-PF, 1.86 MMBtu/hr, oil and liquid petroleum gas-fired	None
4	Rotary impact crusher and material handling	None

FACILITY-WIDE CONDITIONS

Fugitive Emissions

2.1 All reasonable precautions shall be taken to prevent PM from becoming airborne. In determining what is reasonable, considerations will be given to factors such as the proximity of dust-emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of PM. Some of the reasonable precautions include, but are not limited to, the following:

Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.

Application, where practical, of asphalt, oil, water or suitable chemicals to, or covering of, dirt roads, material stockpiles, and other surfaces which can create dust.

Installation and use, where practical, of hoods, fans, fabric filters, or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.

Covering, where practical, of open-bodied trucks transporting materials likely to give rise to airborne dusts.

Paving of roadways and their maintenance in a clean condition, where practical.

Prompt removal of earth or other stored material from streets, where practical.

2.2 The permittee shall monitor and record in a log, during operation, the periodic method(s) used to reasonably control fugitive emissions from this facility. The log shall include the type of control used (i.e., water, environmentally safe chemical dust suppressants, etc.) as well as the circumstances under which no controls are used.

[IDAPA 58.01.01.405.01, 5/1/94]

Visible Emissions

2.3 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 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas are the only reason(s) for the failure of the emission to comply with the requirements of this section.

[IDAPA 58.01.01.625, 5/1/94]

2.4 Fugitive emissions shall not be observed leaving the property boundary for a period or periods aggregating more than three minutes in any 60-minute period. Visible emissions shall be determined by Method 22, as described in 40 CFR 60, Appendix A, or a Department-approved alternative method. For purposes of this condition, the property boundary is considered the boundary of any surface-leased property, surface-owned property, or mineral-lease boundary for the Dry Valley Mine.

[IDAPA 58.01.01.405.01, 5/1/94]

Reports and Certifications

2.5 Any reporting required by this permit, including, but not limited to records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certifications, shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete. Any reporting required by this permit shall be submitted to the following:

Air Quality Permit Compliance
Department of Environmental Quality
Pocatello Regional Office
224 S. Arthur
Pocatello, ID 83204

[IDAPA 58.01.01.405.01, 5/1/94]

Open Burning

2.6 The permittee shall comply with the requirements of IDAPA 58.01.01.600-616, *Rules for Control of Open Burning.*

[IDAPA 58.01.01.600-616, 5/1/94]

3. BURNHAM BOILER

3.1 Process Description

The Burnham boiler is a 1.85 MMBtu/hr boiler firing used oil and/or liquefied petroleum gas for space heating.

3.2 Control Description

Emissions from the Burnham boiler are uncontrolled.

Emissions Limits

3.3 Emissions Limits

Particulate matter emissions from the boiler shall not exceed 0.05 grains per dry standard cubic foot (gr/dscf) corrected to 3% oxygen during the combustion of used oil.

[IDAPA 58.01.01.677, 5/1/94]

Operating Requirements

3.4 Used Oil Specifications

3.4.1 Oil combusted in the boiler shall be non-hazardous used oil only.

3.4.2 Used oil combusted in the boiler shall not contain more than 0.7 parts per million (ppm) by weight of arsenic, 1.7 ppm by weight of cadmium, and 7.9 ppm of chromium.

3.4.3 The boiler is limited to firing 22,000 gallons of used oil per consecutive 12-month period.

[IDAPA 58.01.01.405.01, 5/1/94]

Monitoring and Recordkeeping Requirements

3.5 Used Oil Burned

The permittee shall monitor and record the amount of used oil burned in the Burnham boiler on a gallons-per-month basis. Records shall be kept onsite for a five-year period and shall be made available to Department representatives upon request.

[IDAPA 58.01.01.405.01, 5/1/94]

3.6 Used Oil Analysis

The permittee shall analyze a grab sample of the used oil in the holding tank prior to the beginning of the heating season to demonstrate compliance with Permit Condition 3.4.2. The results of the used-oil analysis shall be accompanied by a record of the estimated amount of used oil in the holding tank, which the sample represents. A compilation of the most recent five years of records shall be kept onsite, and shall be made available to Department representatives upon request.

[IDAPA 58.01.01.405.01, 5/1/94]

4. ROTARY IMPACT CRUSHER AND MATERIAL HANDLING

4.1 Process Description

The primary purpose of the emissions unit is to process and crush phosphate ore for loadout to railcars.

4.2 Control Description

Emissions from the rotary impact crusher and material handling are uncontrolled.

Emissions Limits

4.3 Crusher Opacity Limit

Particulate matter emissions from portable rock crushers shall not exhibit more than 15% opacity. Opacity shall be determined using the procedures specified in IDAPA 58.01.01.625.

[40 CFR 60.672(c)]

4.4 Transfer Point Opacity Limit

Particulate matter emissions from any transfer point on belt conveyors, or from each grinding mill, screening operation, bucket elevator, belt conveyor bagging operation, storage bin, enclosed truck, or rail car loading station shall not exhibit greater than 10% opacity. Opacity shall be determined using the procedures specified in the Department's "Procedures Manual for Air Pollution Control."

[40 CFR 60.672(b)]

Operating Requirements

4.5 Phosphate Ore Throughput

Annual phosphate ore throughput from the haul-truck loadout at the storage pile to the railcar loading shall be limited to 3,000,000 tons per consecutive 12-month period on a dry tonnage basis.

[IDAPA 58.01.01.405.01, 5/1/94]

Monitoring and Recordkeeping Requirements

4.6 Phosphate Ore Throughput

The permittee shall monitor monthly and record the total throughput of phosphate ore throughput from the haul truck loadout at the storage pile to the railcar loading. A compilation of the most recent five years of records shall be kept onsite and shall be made available to Department representatives upon request.

[IDAPA 58.01.01.405.01, 5/1/94]

5. TIER II PERMIT GENERAL PROVISIONS

1. All emissions authorized herein shall be consistent with the terms and conditions of this permit. The emission of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the *Rules for the Control of Air Pollution in Idaho*, and the Environmental Protection and Health Act, Idaho Code §39-01 et seq.

2. The permittee shall at all times (except as provided in the *Rules for the Control of Air Pollution in Idaho*) maintain and operate in good working order all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable laws for the control of air pollution.

3. The permittee shall allow the Director, and/or his authorized representative(s), upon the presentation of credentials to do the following:

   - To enter upon the permittee's premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.

   - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and to require stack emissions testing (i.e., performance tests) in conformance with state-approved or accepted EPA procedures when deemed appropriate by the Director.

4. Except for data determined to be confidential under Section 9-342A, *Idaho Code*, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate regional office of the Department of Environmental Quality.

5. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.

6 In the event of any change in control or ownership of source(s) from which the authorized emissions emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Director.

7. This permit shall be renewable on the expiration date, provided the permittee submits any and all information necessary for the Director to determine the amount and type of air pollutants emitted from the equipment for which this permit is granted. Failure to submit such information within 60 days after receipt of the Director's request shall cause the permit to become void.

8. The Director may require the permittee to develop a list of operation and maintenance procedures to be approved by the Department. Such list of procedures shall become a part of this permit by reference, and the permittee shall adhere to all of the operation and maintenance procedures contained therein.

9. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.