



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

January 12, 2012

Josh Regan
Plant Manager
Nu-West Industries, Inc. – Soda Springs
3010 Conda Rd.
Soda Springs, ID 83276

RE: Facility ID No. 029-00003, Nu-West Industries, Inc., Soda Springs
Tier I Operating Permit Administrative Amendment

Dear Mr. Regan:

The Department of Environmental Quality (DEQ) is issuing amended Tier I Operating Permit No. T1-060308, project 60957, for Nu-West Industries, Inc. at Soda Springs in accordance with IDAPA 58.01.01.381, Rules for the Control of Air Pollution in Idaho. This permit has been administratively amended by DEQ by including the requirements of NESHAP Subpart ZZZZ for an emergency IC engine at the facility. This updated T1 Operating Permit is effective immediately.

Please be aware this permit replaces the previous Tier I Operating Permit No. T1-060308, issued March 4, 2011.

If you have questions regarding the amendment procedure or this notification, please contact Darrin Pampaian at 208-373-0502 or darrin.pampaian@deq.idaho.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Simon".

Mike Simon
Stationary Source Program Manager
Air Quality Division

MS/dp

Permit No. T1-060308, PROJ 60957



**Air Quality
TIER I OPERATING PERMIT**

**State of Idaho
Department of Environmental
Quality**

PERMIT NO.: T1-060308

FACILITY ID NO.: 029-00003

AQCR: 61

CLASS: A

ZONE: 12

SIC: 2874

NAICS: 325312

UTM COORDINATE (km): 455.8 , 4731.8

1. PERMITTEE

Nu-West Industries, Inc.; Nu-West Conda Phosphate Operations

2. PROJECT

PROJECT #60957; Incorporating NESHAP Subpart ZZZZ requirements

3. MAILING ADDRESS

3010 Conda Road

CITY

Soda Springs

STATE

ID

ZIP

83276

4. FACILITY CONTACT

Aaron Chambers

TITLE

Environmental Supervisor

TELEPHONE

(208) 547-4381 ext. 308

5. RESPONSIBLE OFFICIAL

Josh Regan

TITLE

Plant Manager

TELEPHONE

(208) 547-4381

6. EXACT PLANT LOCATION

7 miles north of Soda Springs, 1.2 miles east of Highway 34

COUNTY

Caribou

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Phosphate-based fertilizer products

8. PERMIT AUTHORITY

This Tier I operating permit is issued pursuant to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.300 through 386. The permittee shall comply with the terms and conditions of this permit.

This permit incorporates all applicable terms and conditions of prior air quality permits issued by the Idaho Department of Environmental Quality (DEQ) for the permitted source, unless the permittee emits toxic pollutants subject to state only requirements pursuant to IDAPA 58.01.01.210, and the permittee elects not to incorporate those terms and conditions into this operating permit.

The effective date of this permit is the date of signature by DEQ on the cover page.

**DARRIN PAMPAIAN, P.E., PERMIT WRITER
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**MIKE SIMON, STATIONARY SOURCE PROGRAM MANAGER
DEPARTMENT OF ENVIRONMENTAL QUALITY**

DATE ISSUED:

March 4, 2011

DATE MODIFIED/AMENDED

January 12, 2012

DATE EXPIRES:

March 4, 2016

Table of Contents

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE	3
1. TIER I OPERATING PERMIT SCOPE	4
2. FACILITY-WIDE CONDITIONS.....	5
3. GRANULATION PLANT AND DRY PRODUCT STORAGE AND TRANSFER.....	14
4. EAST SULFURIC ACID PLANT	20
5. NEBRASKA BOILER (B-5)	25
6. PHOSPHORIC ACID AND SUPERPHOSPHORIC ACID PLANTS.....	31
7. GYP STACK SYSTEM.....	39
8. CLEAVER-BROOKS BOILER.....	45
9. EMERGENCY IC ENGINE	50
10. INSIGNIFICANT ACTIVITIES.....	52
11. TIER I OPERATING PERMIT GENERAL PROVISIONS.....	53
11. APPENDIX A – 40 CFR 63 SUBPART A REQUIREMENTS FOR SUBPART AA.....	59
12. APPENDIX B – 40 CFR 63 SUBPART A REQUIREMENTS FOR SUBPART BB.....	63
13. APPENDIX C – 40 CFR 60 SUBPART A REQUIREMENTS	67
14. APPENDIX D – 40 CFR 61 SUBPART A REQUIREMENTS	69

Acronyms, Units, And Chemical Nomenclature

AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
ASTM	American Society of Testing and Materials
CAA	Clean Air Act
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department Environmental Quality
dscf	dry standard cubic feet
EPA	U.S. Environmental Protection Agency
gr	grain (1 lb = 7,000 grains)
gr/dscf	grains per dry standard cubic foot
gyp	phosphogypsum
HAP	hazardous air pollutant
HBPOM	high boiling point organic material
H ₂ SO ₄	sulfuric acid
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
lb/hr	pounds per hour
MACT	Maximum Available Control Technology
MIBK	methyl isobutyl ketone
MMBtu/hr	million British thermal units per hour
NAICS	North American Industry Classification System
NESHAP	Nation Emission Standards for Hazardous Air Pollutants
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
O&M	operations and maintenance
P ₂ O ₅	phosphorous pentoxide
pCi/(m ² -sec)	pico curies per square meter, per second
pCi/(ft ² -sec)	pico curies per square foot, per second
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter of 10 micrometers or less
ppm	parts per million
ppmw	parts per million by weight
PTC	permit to construct
PW	process weight
RMP	Risk Management Plan
scf	standard cubic feet
scm	standard cubic meter
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SO _x	sulfur oxides
SPA	superphosphoric acid
T/yr	tons per year
U.S.C.	United States Code
VOC	volatile organic compound

1. TIER I OPERATING PERMIT SCOPE

Purpose

- 1.1 This permit establishes facility-wide requirements in accordance with the Idaho State Implementation Plan control strategy and the Rules. It is a renewal of the facility's Tier I operating permit.
- 1.2 This Tier I permit incorporates applicable requirements from the following permits and consent order:
- PTC No. P-2009.0068, issued October 14, 2010 (Phosphoric and Superphosphoric Acid Plants, Granulation Plant, and Cleaver Brooks Boiler)
 - PTC No. P-2010.0002, issued March 25, 2010 (East Sulfuric Acid Plant)
 - PTC No. P-2009.0002, issued February 20, 2009 (Gyp Stack System)
 - PTC No. 029-00003, issued July 7, 1995, as amended on July 26, 1995 and on August 14, 1996 for the Nebraska B-5 Boiler
 - Amended Consent Order issued October 24, 1973 regarding the West Sulfuric Acid Plant
- 1.3 This Tier I renewal replaces the following permit:
- Tier I No. T1-060308, issued March 4, 2011

Regulated Sources

- 1.4 Table 1.1 lists all sources of emissions regulated in this Tier I operating permit.

Table 1.1 REGULATED SOURCES

Permit Section	Source Description	Emissions Control(s)
2	North End ore receiving, handling and storage	Reasonable control of fugitive dust
3	Granulation Plant	A-Fa-1a Venturi Scrubber (wet, Phosphoric Acid) A-Fa-1b Spray tower scrubber (water)
3	Granulation Plant	A-Fa-2a Multiple Cyclone (dry) A-Fa-2b Venturi Scrubber (wet, Phosphoric Acid)
3	Dry product transfer	Enclosure
3	Dry product storage	Enclosure
3	Dry product loadout	Chemical dust suppressant
4	East Sulfuric Acid Plant	Dual absorption contact process, and vertical tube mist eliminator, cesium catalyst in the fourth bed of converter
5	Nebraska boiler (B-5) Manufacturer: Nebraska Boiler Company Model Number: NSX-G-107-ECON Rated Heat Input: 213.8 MMBtu/hr Steam Capacity: 175,000 lb/hr Fuel: Natural gas	Low NO _x boiler package
6	Phosphoric acid process	Multi-stage horizontal cross-flow scrubber (A-Pa-1) Conditioning vent scrubber (A-Pp-3)
6	Superphosphoric acid process	Multi-stage horizontal cross-flow scrubber (A-Pb-1)
6	Thermal fluid heaters	Low NO _x package thermal heaters
7	Gyp Stack System	Reasonable control of fugitive dust, and visible liquid layer surface area
8	Cleaver-Brooks boiler Manufacturer: Cleaver-Brooks Model Number: DFE-132 IWT Rated Heat Input: 180 MMBtu/hr Steam Capacity: ~150,000 lb/hr Fuel: Natural gas	Low-NO _x package boiler

Table 1.1 REGULATED SOURCES (continued)

Permit Section	Source Description	Emissions Control(s)
9	Emergency IC engine Manufacturer: Caterpillar Model Number: 3512 DITA Maximum Rating: 1,545 bhp Fuel: Diesel	

2. FACILITY-WIDE CONDITIONS

The following requirements apply generally to emissions units at the facility.

Table 2.1 FACILITY-WIDE APPLICABLE REQUIREMENTS SUMMARY

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring and Record-keeping Requirements
2.1	Fugitive dust emissions	Reasonable precautions	IDAPA 58.01.01.650-651	2.2, 2.3, 2.4, 2.11
2.5	Odorous gases, liquids, or solids	No emissions that cause air pollution	IDAPA 58.01.01.775-776	2.6, 2.11
2.7	Visible emissions	20% opacity for no more than three minutes in any 60-minute period	IDAPA 58.01.01.625	2.8, 2.11
2.9	Excess emissions	Compliance with IDAPA 58.01.01.130-136	IDAPA 58.01.01.130	2.9-2.9.5, 2.11
2.10	PM ₁₀ , PM, NO _x , SO ₂ , CO, fluorides, opacity, etc.	Performance Testing	IDAPA 58.01.01.157	2.11
2.13	Fuel-burning equipment PM standard	Grain-loading	IDAPA 58.01.01.676-677	2.13.1, 2.11
2.14	Fuel sulfur content	Fuel Oil ASTM grade No. 1 – 0.3% by weight ASTM grade No. 2 – 0.5% by weight	IDAPA 58.01.01.728	2.14.1, 2.11
2.15	Open burning	In accordance with IDAPA 58.01.01.600-616	IDAPA 58.01.01.600-623	2.11
2.16	Asbestos	Compliance with 40 CFR 61, Subpart M	40 CFR 61, Subpart M	2.11, 2.16
2.17	Accidental release prevention	Compliance with 40 CFR 68.215(a)(2)	40 CFR 68.10(a)	2.11, 2.17
2.18	Recycling and emissions reduction	Reduce emissions of Class I and Class II refrigerants in accordance with 40 CFR 82, Subpart F	40 CFR 82, Subpart F	2.11, 2.18
2.19	Fugitive dust emissions	Visible emissions at property boundary not to exceed 3 minutes in any 60-minute period	PTC Condition, 7/12/2000	2.2, 2.3, 2.4, 2.11
2.20	Fluoride emissions	0.3 pounds fluoride per ton P ₂ O ₅ input	IDAPA 58.01.01.751.01	2.11, 2.21
2.22	Operation of ambient monitors	Operate 2 PM ₁₀ and 1 SO ₂ monitors	Consent Order, Condition 10, 10/24/73	2.11
2.23	Applicability of Federal requirements	If the permit conflicts with the Federal rule, the Federal Rule applies	40 CFR 60	none

Fugitive Emissions

- 2.1 All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651.
[IDAPA 58.01.01.650, 651, 3/30/07]
- 2.2 The permittee shall monitor and maintain records of the frequency and the method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive dust emissions.
[IDAPA 58.01.01.322.06, 07, 5/1/94]
- 2.3 The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after a valid complaint is received. The records shall include, at a minimum, the date that each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.
[IDAPA 58.01.01.322.06, 07, 5/1/94]
- 2.4 The permittee shall conduct a monthly facility-wide inspection of potential sources of fugitive dust emissions, during daylight hours and under normal operating conditions, to ensure that the methods used to reasonably control fugitive dust emissions are effective. If fugitive dust emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each fugitive dust emissions inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive dust emissions, and the date the corrective action was taken.
[IDAPA 58.01.01.322.06, 07, 5/1/94]

Odors

- 2.5 The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.
[IDAPA 58.01.01.775-776 (state-only), 5/1/94]
- 2.6 The permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.
[IDAPA 58.01.01.322.06, 07 (state-only), 5/1/94]

Visible Emissions

- 2.7 The permittee shall not 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 is the only reason for the failure of the emission to comply with the requirements of this section.
[IDAPA 58.01.01.625, 4/5/00]

2.8 The permittee shall conduct a monthly facility-wide inspection of potential sources of visible emissions, during daylight hours and under normal operating conditions. Sources that are monitored using a continuous opacity monitoring system (COMS) are not required to comply with this permit condition. The inspection shall consist of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emission, the permittee shall either:

a) take appropriate corrective action as expeditiously as practicable to eliminate the visible emissions. Within 24 hours of the initial see/no see evaluation and after the corrective action, the permittee shall conduct a see/no see evaluation of the emissions point in question. If the visible emissions are not eliminated, the permittee shall comply with b).

or

b) 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 greater than 20%, as measured using Method 9, for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in its annual compliance certification and in accordance with IDAPA 58.01.01.130-136.

Potential sources of visible emissions listed as insignificant activities in Section 9 and covered by Condition 2.8 are:

- Ore unloading and transfer (F-Oa-1);
- Ore storage to wash plant (F-Ob-1);
- Wash plant and grinding mills (S-W-1, S-W-2);
- SW and NE Sand Storage Piles; and
- Molten sulfur railcar unloading.

The permittee shall maintain records of the results of each visible emission inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

[IDAPA 58.01.01.322.06, 07, 5/1/94; IDAPA 58.01.01.322.08, 4/5/00]

Excess Emissions

Excess Emissions - General

2.9 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions. The provisions of IDAPA 58.01.01.130-136 shall govern in the event of conflicts between Permit Condition 2.9 and the regulations of IDAPA 58.01.01.130-136.

2.9.1 The person responsible for or in charge of a facility during an excess emissions event shall, with all practicable speed, initiate and complete appropriate and reasonable action to correct the conditions causing the excess emissions event; to reduce the frequency of occurrence of such events; to minimize the amount by which the emission standard is exceeded; and shall, as provided below or upon request of DEQ, submit a full report of such occurrence, including a statement of all known causes, and of the scheduling and nature of the actions to be taken.

[IDAPA 58.01.01.132, 4/5/00]

Excess Emissions – Startup, Shutdown, Scheduled Maintenance

2.9.2 In all cases where startup, shutdown, or scheduled maintenance of any equipment or emission unit is expected to result or results in an excess emissions event, the owner or operator of the facility or emissions unit generating the excess emissions shall demonstrate compliance with IDAPA 58.01.01.133.01(a) through (d), including, but not limited to, the following:

[IDAPA 58.01.01.133, 4/5/00]

- A prohibition of any scheduled startup, shutdown, or maintenance resulting in excess emissions shall occur during any period in which an Atmospheric Stagnation Advisory or a Wood Stove Curtailment Advisory has been declared by DEQ.

[IDAPA 58.01.01.133.01.a, 3/20/97]

- Notifying DEQ of the excess emissions event as soon as reasonably possible, but no later than two hours prior to, the start of the event, unless the owner or operator demonstrates to DEQ's satisfaction that a shorter advance notice was necessary.

[IDAPA 58.01.01.133.01.b, 4/5/00]

- The owner or operator of a source of excess emissions shall report and record the information required pursuant to Permit Conditions 2.9.4 and 2.9.5 and IDAPA 58.01.01.135 and 136 for each excess emissions event due to startup, shutdown, or scheduled maintenance.

[IDAPA 58.01.01.133.01.c, 3/20/97]

Excess Emissions – Upset, Breakdown, or Safety Measures

2.9.3 In all cases where upset or breakdown of equipment or an emissions unit, or the initiation of safety measures, results or may result in an excess emissions event, the owner or operator of the facility or emissions unit generating the excess emissions shall demonstrate compliance with IDAPA 58.01.01.134.01(a) and (b) and the following:

[IDAPA 58.01.01.134, 4/5/00]

2.9.3.1 For all equipment or emissions units from which excess emissions result during upset or breakdown conditions, or for other situations that may necessitate the implementation of safety measures which cause excess emissions, the facility owner or operator shall comply with the following:

[IDAPA 58.01.01.134.02, 4/5/00]

- The owner or operator shall immediately undertake all appropriate measures to reduce and, to the extent possible, eliminate excess emissions resulting from the event and to minimize the impact of such excess emissions on the ambient air quality and public health.

[IDAPA 58.01.01.134.02.a, 4/5/00]

- The owner or operator shall notify DEQ of any upset, breakdown, or safety event that results in excess emissions. Such notification shall identify the time, specific location, equipment or emissions unit involved, and (to the extent known) the cause(s) of the occurrence. The notification shall be given as soon as reasonably possible, but no later than 24 hours after the event, unless the owner or operator demonstrates to DEQ's satisfaction that the longer reporting period was necessary.

[IDAPA 58.01.01.134.02.b, 4/5/00]

- The owner or operator shall report and record the information required pursuant to Permit Conditions 2.9.4 and 2.9.5 and IDAPA 58.01.01.135 and 136 for each excess emissions event caused by an upset, breakdown, or safety measure.

[IDAPA 58.01.01.134.02.c, 3/20/97]

2.9.3.2 During any period of excess emissions caused by upset, breakdown, or operation under facility safety measures, DEQ may require the owner or operator to immediately reduce or cease operation of the equipment or emissions unit causing the period until such time as the condition causing the excess has been corrected or brought under control. Such action by DEQ shall be taken upon consideration of the factors listed in IDAPA 58.01.01.134.03 and after consultation with the facility owner or operator.

[IDAPA 58.01.01.134.03 4/5/00]

Excess Emissions – Reporting and Recordkeeping

2.9.4 A written report for each excess emissions event shall be submitted to DEQ by the owner or operator no later than 15 days after the beginning of such an event. Each report shall contain the information specified in IDAPA 58.01.01.135.02.

[IDAPA 58.01.01.135.01 and 02, 3/20/97]

2.9.5 The owner or operator shall maintain excess emissions records at the facility for the most recent five calendar-year period. The excess emissions records shall be made available to DEQ upon request and shall include the information requested by IDAPA 58.01.01.136.03(a) and (b) as summarized in the following:

[IDAPA 58.01.01.136.01, 02, 3/20/97; IDAPA 58.01.01.136.03, 4/5/00]

- An excess emissions log for each emissions unit or piece of equipment containing copies of all reports that have been submitted to DEQ pursuant to IDAPA 58.01.01.135 for the particular emissions unit or equipment; and
- Copies of all startup, shutdown, and scheduled maintenance procedures and upset, breakdown, or safety preventative maintenance plans that have been developed by the owner or operator in accordance with IDAPA 58.01.01.133 and 134, and facility records as necessary to demonstrate compliance with such procedures and plans.

[IDAPA 58.01.01.136.03.a, 4/5/00]

[IDAPA 58.01.01.136.03.b, 3/20/97; IDAPA 58.01.01.130-136, 4/5/00 (state-only, federally-enforceable upon approval into the SIP); IDAPA 58.01.01.322.08.b, 3/23/98]

Performance Testing

2.10 If testing is required, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test or shorter time period as provided in a permit, order, consent decree, or by DEQ approval. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

All testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, prior to conducting any performance test, the permittee is encouraged to submit in writing to DEQ, at least 30 days in advance, the following for approval:

- The type of test method to be used
- Any extenuating or unusual circumstances regarding the proposed test
- The proposed schedule for conducting and reporting the test

The permittee shall submit a compliance test report for the respective test to DEQ within 30 days following the date in which a compliance test required by this permit is concluded. The compliance test report shall include all process operating data collected during the test period as well as the test results, raw test data, and associated documentation, including any approved test protocol.

The proposed test date(s), test date rescheduling notice(s), compliance test report, and all other correspondence shall be sent to:

Air Quality Permit Compliance
Department of Environmental Quality
Pocatello Regional Office
444 Hospital Way, # 300
Pocatello, ID 83201
Phone: (208) 236-6160

Fax: (208) 236-6168

[IDAPA 58.01.01.157, 4/5/00; IDAPA 58.01.01.322.06, 08.a, 09, 5/1/94]

Monitoring and Recordkeeping

2.11 The permittee shall maintain sufficient recordkeeping to assure compliance with all of the terms and conditions of this operating permit. Recording of monitoring information shall include, but not be limited to the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

The permittee is not required to conduct the monitoring and associated recordkeeping for any emission unit if the emissions unit did not operate at any time between required monitoring events, provided the following conditions are met:

- The permittee makes a contemporaneous record in the log or file maintained on site of the date and time that the emission unit ceased operation, and the reason why the emission unit did not operate.
- The permittee makes a contemporaneous record in a log or file maintained on site of the date and time that the emission unit resumed operation.

[IDAPA 58.01.01.322.07, 5/1/94]

Reports and Certifications

2.12 All periodic reports and certifications required by this permit shall be submitted to DEQ within 30 days of the end of each specified reporting period. Excess emissions reports and notifications shall be submitted in accordance with IDAPA 58.01.01.130-136. Reports, certifications, and notifications shall be submitted to:

Air Quality Permit Compliance
Department of Environmental Quality
Pocatello Regional Office
444 Hospital Way, #300
Pocatello, ID 83201
Phone: (208) 236-6160

Fax: (208) 236-6168

The periodic compliance certification required by General Provision 21 shall also be submitted within 30 days of the end of the specified reporting period to:

EPA Region 10
Air Operating Permits, OAQ-107
1200 Sixth Ave.
Seattle, WA 98101

[IDAPA 58.01.01.322.08, 11, 5/1/94]

Fuel-burning Equipment

2.13 The permittee shall not discharge PM to the atmosphere from any fuel-burning equipment in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas.

[IDAPA 58.01.01.676-677, 5/1/94]

2.13.1 The boilers and heaters not listed as insignificant emission units (Section 9) shall be fired on natural gas exclusively.

[IDAPA 58.01.01.322.01, 3/19/99]

Sulfur Content

2.14 No person shall sell, distribute, use, or make available for use any distillate fuel oil containing more than the following percentages of sulfur:

- ASTM Grade 1 fuel oil - 0.3% by weight (3000 ppmw).
- ASTM Grade 2 fuel oil - 0.5% by weight (5000 ppmw).

[IDAPA 58.01.01.728, 5/1/94]

2.14.1 The permittee shall maintain documentation of supplier verification of distillate fuel oil sulfur content on an as-received basis.

[IDAPA 58.01.01.322.01, 3/19/99]

Open Burning

2.15 The permittee shall comply with the requirements of IDAPA 58.01.01.600-623, Rules for Control of Open Burning.

[IDAPA 58.01.01.600-623, 5/8/09]

Asbestos

2.16 The permittee shall comply with all applicable portions of 40 CFR 61, Subpart M - Asbestos.

[40 CFR 61, Subpart M]

Regulated Substances for Accidental Release Prevention

2.17 This facility is subject to Part 68 and shall certify compliance with all requirements of 40 CFR 68, including the registration and submission of the RMP, as part of the annual compliance certification required by 40 CFR 70.6(c)(5).

[40 CFR 68.215(a)(2); IDAPA 58.01.01.322.11, 5/1/94; 40 CFR 68.215(a)(ii)]

Recycling and Emissions Reductions

2.18 The permittee shall comply with applicable standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, Recycling and Emissions Reduction.

Fugitive Dust Emissions

- 2.19 Fugitive dust emissions shall not be observed leaving the property for a period or periods aggregating more than three minutes in any 60-minute period. Fugitive visible emissions shall be determined by EPA Reference Method 22, as described in 40 CFR 60, Appendix A, or by a DEQ-approved alternative method.

[PTC Condition, 7/12/00]

Rules for Control of Fluoride Emissions

- 2.20 The permittee shall not allow, suffer, cause or permit the discharge into the atmosphere of total fluoride emissions in gaseous and in particulate form, expressed as fluoride (F-) from the phosphate fertilizer plant sources listed below in excess of 0.3 pounds of fluoride per ton of P₂O₅ input to the phosphate fertilizer plant, calculated at maximum-rated capacity.

- Wet phosphoric acid production; and
- Super phosphoric acid production; and
- Diammonium phosphate plants; and
- Monoammonium phosphate production (if produced).

[IDAPA 58.01.01.751.01, 5/1/94 (State-only Requirement)]

Monitoring, Testing, and Reporting Requirements for Fluorides

- 2.21 Compliance with IDAPA 58.01.01.751.01 will be adjudged upon the results of the continuing program of fluoride sampling of potential grazing areas and alfalfa-growing areas conducted by DEQ. Sampling conducted by any person subject to IDAPA 58.01.01.751 may be accepted for determining compliance with IDAPA 58.01.01.751.01 if such sampling is conducted at sites approved by DEQ in advance of sampling, using analytical procedures appearing in the Procedures Manual for Air Pollution Control, Section I (Source Test Methods) or equivalent methods approved by DEQ in advance of sampling. Compliance with IDAPA 58.01.01.751.01 shall be demonstrated by testing methods approved in advance by DEQ. When approved by the Director in advance of sampling, engineering calculations may be submitted in lieu of emission data.

[IDAPA 58.01.01.751.02, 5/1/94 (State-only Requirement)]

Operation of Ambient Monitors

- 2.22 The permittee shall operate two PM₁₀ monitors and one continuous ambient SO₂ monitor at sites approved by DEQ. Results of the above described monitoring shall be submitted to DEQ monthly in accordance with the State Implementation Plan, 40 CFR 52.670(d), EPA-approved State Source-specific Requirements.

[Consent Order, Condition 10, 10/24/73; 40 CFR 52.670(d)]

MACT 40 CFR 63 Subpart A – Reporting Schedule

2.23 In accordance with 40 CFR 63.10(a)(5), if an owner or operator of an affected source in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such source under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. Procedures governing the implementation of this provision are specified in 40 CFR 63.9(i).

and,

In accordance with 40 CFR 63.10(a)(7), if an owner or operator supervises one or more stationary sources affected by standards established pursuant to section 112 of the Act (as amended November 15, 1990) and standards set under part 60, part 61, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required by each relevant (i.e., applicable) standard shall be submitted throughout the year. Procedures governing the implementation of this provision are specified in 40 CFR 63.9(i).

Periodic reports shall be submitted as provided below. Any change may be done without a revision of this permit in accordance with this permit condition:

- Reports required by 40 CFR 63.10(d)(5)(i) shall be submitted with the reports required by General Provisions 21 and 24;
- Reports required by 40 CFR 63.6(e)(3)(iv) shall be submitted with the report required by General Provision 24; and
- Reports required by 40 CFR 63.10(d)(5)(ii) shall be submitted with the report required by General Provision 24.

[40 CFR 63.10(a)(5) and (7)]

Incorporation of Federal Requirements by Reference

2.24 Unless expressly provided otherwise, any reference in this permit to any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of that document for the purposes of the reference, including any notes and appendices therein. Documents include, but are not limited to:

- Standards of Performance for New Stationary Sources (NSPS), 40 CFR Part 60
- National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP), 40 CFR Part 61 and Part 63

For permit conditions referencing or cited in accordance with any document incorporated by reference (including permit conditions identified as NSPS or NESHAP), should there be any conflict between the requirements of the permit condition and the requirements of the document, the requirements of the document shall govern, including any amendments to that regulation.

[40 CFR Parts 60, 61, and 63]

3. GRANULATION PLANT AND DRY PRODUCT STORAGE AND TRANSFER

Summary Description

The following is a narrative description of the dry fertilizer granulation plant and the associated dry product transfer, storage and loadout operations regulated in this Tier I operating permit. This description is for informational purposes only.

Granulation Plant. From Nu-West's raw materials of phosphoric acid, sulfuric acid and ammonia, two different grades of granular fertilizer are produced: Monoammonium Phosphate (MAP) (11-52-0); and occasionally Ammonium Phosphate Sulfate (APS) (16-20-0). The basic reaction utilized for all products is the neutralization of acid with ammonia. The neutralization reaction is exothermic. This heat produces steam, which is responsible for most of the plume of steam out of the stack. Residual steam and minor amounts of particulates are emitted through the free standing stack adjoining the building. At various points in this process, dust, fluorides, or ammonia vapors are generated. A weak sulfuric acid solution is pumped through the scrubbers to capture the vapors. This liquor is pumped back to the pre-neutralizer tank and made into product. The scrubbers at the Granulation Plant conform with EPA's stringent maximum achievable control technology (MACT) standards per 40 CFR 63 Subpart BB. Phosphoric acid from the Phosphoric Acid Plant is pumped to the pre-neutralizing tank where it is mixed with sulfuric acid and ammonia to certain specifications depending on the product being made. Ammonia is also added to a pipe-cross reactor to finish ammoniation of the product. The ammoniation also serves to dry the granular product before the product is discharged. Ammonia comes into the plant by rail car and is unloaded by granulation plant operators into the ammonia sphere. From the granulator, the product is discharged into the rotary dryer where moisture is removed. From the dryer, the product goes by belt conveyor to a screen distribution screw, to four screens that separate the oversized and undersized granules. The oversized granules go to the cage mills where they are broken up and sent back to the granulator. The under sized material goes directly back to the granulator as recycle. Also, some of the on-size product is recycled back to the granulator to help maintain consistent size and moisture of the product. The final product is cooled in a bulk flow cooler. Afterwards, it is coated with a dust control agent. This cooled and coated product is then transferred to shipping via conveyor belt.

Dry Product Transfer, Storage, and Loadout. Dry fertilizer from the granulation plant is conveyed to the shipping warehouse and stored until time to ship to customers. The warehouse holds approximately 60,000 tons of dry fertilizer products. Front-end loaders are used to transfer the product from the piles inside the warehouse to the feeders and conveyers. The fertilizer products are screened for size and loaded into railcars or trucks.

Table 3.1 describes the devices used to control emissions from the Granulation Plant and from dry product transfer, storage, and loadout.

Table 3.1 EMISSIONS UNITS AND EMISSIONS CONTROL DEVICES

Source Code	Emission Units / Processes	Emission Control Device	Emission Point
S-Fa-1	Granulator	A-Fa-1a Venturi Scrubber (wet, Phosphoric Acid)	P-Fa-1/2 (Sources Fa-1 and Fa-2 have a common exhaust)
		A-Fa-1b Spray tower scrubber (water)	
S-Fa-2	Dryer	A-Fa-2a Multiple Cyclone (dry)	P-Fa-1/2
		A-Fa-2b Venturi Scrubber (wet, Phosphoric Acid)	
S-Fa-3	Cooler and Baghouse	A-Fa-1a Venturi Scrubber (wet, Phosphoric Acid) A-Fa-1b Spray tower scrubber (water)	P-Fa-1/2
F-Fb-1	Dry product sizing and transfer	Enclosure, chemical dust suppressant	fugitive dust
F-Fb-2	Dry product storage	Enclosure	fugitive dust
F-Fc-1	Dry product loadout	Chemical dust suppressant, physical stabilization	fugitive dust

Table 3.2 contains only a summary of the requirements that apply to the granulation plant. Specific permit requirements are listed below Table 3.2.

Table 3.2 APPLICABLE REQUIREMENTS SUMMARY

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Operating, Monitoring, and Recordkeeping Requirements
3.1	Fluoride emissions	0.058 lb/ton equivalent P ₂ O ₅ feed	40 CFR 63.622 ⁽¹⁾	3.3, 3.5 - 3.17
3.2	Particulate matter	Process weight limitations	IDAPA 58.01.01.701	3.18
3.4	Equipment Removal	Permanent removal of replaced granulator drum	40 CFR 52.21(b)(33)(iv)	None required.

¹ If any requirement in this permit conflicts with any requirement contained in 40 CFR 63 the requirement in 40 CFR 63 shall govern.

Permit Limits / Standard Summary

3.1 MACT 40 CFR 63 Subpart BB – Fluoride - Diammonium and/or Monoammonium Phosphate Process Line

In accordance with 40 CFR 63.623(a), the owner or operator shall not cause to be discharged into the atmosphere from any affected source any gases which contain total fluorides in excess of 29.0 grams/metric ton of equivalent P₂O₅ feed (0.0580 lb/ton).

[40 CFR 63.623(a)]

3.2 PM - Process Weight Rate Limitations

No person shall emit into the atmosphere from any process or process equipment commencing operation on or after October 1, 1979, PM in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour.

- a. If PW is less than 9,250 lb/hr,

$$E = 0.045(PW)^{0.6}$$

- b. If PW is equal to or greater than 9,250 lb/hr,

$$E = 1.10(PW)^{0.25}$$

[IDAPA 58.01.01.701, 4/5/00]

Operating Requirements

3.3 MACT 40 CFR 63 Subpart BB – Pressure Drops and Flow Rates for Wet Scrubbers

In accordance with 40 CFR 63.624, the owner/operator using a wet scrubbing emission control system must maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant to the requirements of 40 CFR 63.625(f)(1) or (2).

[40 CFR 63.624]

3.4 Granulator Drum Replacement - PSD

The permittee shall permanently discontinue operation of the existing granulator drum after the replacement granulator drum is installed. If the existing granulator drum is proposed to be brought back into operation, it shall be considered to be a new emissions unit and shall be subject to permitting in accordance with IDAPA 58.01.01.200 and 205 (40 CFR 52.21(b)(33)(iv)).

[40 CFR 52.21(b)(33)(iv); PTC Condition, 12/21/06]

Monitoring & Recordkeeping Requirements

3.5 MACT 40 CFR 63 Subpart BB – Throughput Monitoring Systems

In accordance with 40 CFR 63.625(a), the owner or operator shall install, calibrate, maintain, and operate a monitoring system which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of $\pm 5\%$ over its operating range.

[40 CFR 63.625(a)]

3.6 MACT 40 CFR 63 Subpart BB – P₂O₅ Throughput

In accordance with 40 CFR 63.625(b), the owner or operator shall maintain a daily record of equivalent P₂O₅ feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flow rate which meets the requirements of 40 CFR 63.625(a) and then by proceeding according to 40 CFR 63.626(c)(3).

[40 CFR 63.625(b)]

3.7 MACT 40 CFR 63 Subpart BB – Pressure Drop Across Each Scrubber

In accordance with 40 CFR 63.625(c)(1), the owner or operator shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of $\pm 5\%$ over its operating range.

[40 CFR 63.625(c)(1)]

3.8 MACT 40 CFR 63 Subpart BB – Liquid Flow Rate of Each Scrubber

In accordance with 40 CFR 63.625(c)(2), the owner or operator shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of $\pm 5\%$ over its operating range.

[40 CFR 63.625(c)(2)]

3.9 MACT 40 CFR 63 Subpart BB – Scrubber Pressure Drop and Liquid Flow Rate Ranges

In accordance with 40 CFR 63.625(f), the owner or operator must establish allowable ranges for operating parameters using the methodology specified in either 63.625(f)(1) or 63.625(f)(2).

3.9.1 In accordance with 40 CFR 63.625(f)(1), the allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is $\pm 20\%$ of the baseline average value determined as a requirement of 40 CFR 63.626(c)(4) or (d)(4). The Administrator retains the right to reduce the $\pm 20\%$ adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard, but in no instance shall the adjustment be reduced to less than $\pm 10\%$. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, the owner or operator shall determine whether new allowable ranges of baseline average values will be based upon the new performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retested and the performance test results are submitted to the Administrator pursuant to 40 CFR 63.627(c)(1), 63.7(g)(1), and/or 63.10(d)(2), the owner or operator will indicate whether the operating range will be based on the new performance test or the previously established range. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

3.9.2 In accordance with 40 CFR 63.625(f)(2), the owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges for the daily averages of the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with 40 CFR 63, Subpart BB. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in 40 CFR 63.626(c)(4) or (d)(4). As an alternative, the owner or operator can establish the allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in 40 CFR 63, Subpart BB and established in the manner required in 40 CFR 63.626(c)(4) or (d)(4). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges. When a source using the methodology of this paragraph is retested, the owner or operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters outside the previously established ranges. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the

new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

[40 CFR 63.625(f)]

3.10 MACT 40 CFR 63 Subpart BB – Performance Testing

In accordance with 40 CFR 63.626(a), once per annum, the owner or operator shall conduct a performance test to demonstrate compliance with the applicable emission standard for each existing and each new diammonium and/or monoammonium phosphate process line. The owner or operator shall conduct the performance test according to the procedures in 40 CFR 63, Subpart A and in 40 CFR 63.626.

[40 CFR 63.626(a)]

3.11 MACT 40 CFR 63 Subpart BB – Performance Test Methods

In accordance with 40 CFR 63.626(b), in conducting performance tests, each owner or operator of an affected source shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A, or other methods and procedures as specified in 40 CFR 63.626, except as provided in 40 CFR 63.7(f).

[40 CFR 63.626(b)]

3.12 MACT 40 CFR 63 Subpart BB – Performance Testing - Fluorides

Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line shall determine compliance with the applicable total fluorides standards in 40 CFR 63.622 or 63.623, in accordance with 40 CFR 63.626(c).

[40 CFR 63.626(c)]

3.13 MACT 40 CFR 63 Subpart BB – Recordkeeping

In accordance with 40 CFR 63.627(b), the owner or operator shall comply with the recordkeeping requirements in 40 CFR 63.10. Requirements are included in Appendix B of this permit.

[40 CFR 63.627(b)]

Reporting

3.14 MACT 40 CFR 63 Subpart BB – MACT Reports

In accordance with 40 CFR 63.627(c), the owner or operator shall comply with the reporting requirements specified in 40 CFR 63.10 as follows:

[40 CFR 63.627(c)]

3.14.1 Performance Test Report

As required by 40 CFR 63.10, the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance status required in 40 CFR 63.9.

[40 CFR 63.627(c)(1)]

3.14.2 Excess Emissions Report

As required by 40 CFR 63.10, the owner or operator shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in 40 CFR 63.10. When no exceedances of an operating parameter have occurred, such information shall be

included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved, as described in 40 CFR 63.10.

[40 CFR 63.627(c)(2)]

3.14.3 Summary Report

If the total duration of control system exceedances for the reporting period is less than 1% of the total operating time for the reporting period, the owner or operator shall submit a summary report containing the information specified in 40 CFR 63.10 rather than the full excess emissions report, unless required by the Administrator. The summary report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half.

[40 CFR 63.627(c)(3)]

3.14.4 If the total duration of control system operating parameter exceedances for the reporting period is 1% or greater of the total operating time for the reporting period, the owner or operator shall submit a summary report and the excess emissions report.

[40 CFR 63.627(c)(4)]

3.15 MACT 40 CFR 63 Subpart BB – Notification Requirements

In accordance with 40 CFR 63.627(a), the owner or operator shall comply with notification requirements in 40 CFR 63.9. Requirements are included in Appendix B of this permit.

[40 CFR 63.627(a)]

MACT 40 CFR 63 Subpart BB - Phosphate Fertilizers Production Plant Exemption From New Source Performance Standards

3.16 In accordance with 40 CFR 63.631, the Granulation Plant is an affected source subject to the provisions of 40 CFR 63, Subpart BB, and it is exempted from any otherwise applicable new source performance standard contained in 40 CFR 60, Subpart V, Subpart W, or Subpart X. To be exempt, a source must have a current operating permit pursuant to Title V of the Act and the source must be in compliance with all requirements of 40 CFR 63, Subpart BB.

[40 CFR 63.631]

MACT 40 CFR 63 Subpart BB - Applicability of MACT General Provisions

3.17 In accordance with 40 CFR 63.628, the owner or operator shall comply with the requirements of the general provisions in 40 CFR 63, Subpart A as shown in Appendix A to 40 CFR 63, Subpart BB. Refer to the table in Appendix B of this permit.

[40 CFR 63.628]

PTC General Provision

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

[PTC General Provision, 7/12/00]

4. EAST SULFURIC ACID PLANT

Summary Description

The following is a narrative description of the East Sulfuric Acid Plant regulated in this Tier I operating permit. This description is for informational purposes only.

The East Sulfuric Acid Plant receives elemental sulfur from offsite. The sulfur is combusted to form sulfur dioxide (SO₂). The sulfur dioxide is converted to sulfur trioxide (SO₃) in a series of four catalytic converters; the fourth converter includes a cesium catalyst. The SO₃ is converted to sulfuric acid in two absorption towers.

Table 4.1 describes the devices used to control emissions from the East Sulfuric Acid Plant.

Table 4.1 EMISSIONS UNITS AND EMISSIONS CONTROL DEVICES

Source Code	Emission Unit(s) / Process(es)	Emission Control Device	Emission Point
S-Se-1	East Sulfuric Acid Plant	Dual absorption contact process, vertical tube mist eliminator, and cesium catalyst in the fourth bed of the converter	P-Se-1
---	Cooling Tower	Mist Eliminator	Fugitive
---	Two Waste Heat Boilers (use natural gas during startup)	none	Boiler Vent (used only during startup)
---	Sulfur Storage and Transfer	Enclosed Systems	Fugitive
---	Acid Storage Tanks and Acid Pump Tanks	Enclosed Systems	Fugitive

Table 4.2 contains only a summary of the requirements that apply to the East Sulfuric Acid Plant. Specific permit requirements are listed below Table 4.2.

Table 4.2 APPLICABLE REQUIREMENTS SUMMARY

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Operating, Monitoring and Recordkeeping Requirements
4.1	SO ₂	258 lb/hr 735.5 T/yr	PTC No. P-2010.00002	4.4, 4.5, 4.6, 4.7, 4.8
4.2	SO _x	28 pounds per ton of 100% sulfuric acid production	IDAPA 58.01.01.846	4.8, 4.13
4.3	PM	Determined using the process weight rate formula	IDAPA 58.01.01.701	4.8
4.9	SO ₂	4 pounds per ton of 100% sulfuric acid production	40 CFR 60.82	4.13, 4.14, 4.15
4.10	Sulfuric acid mist	0.15 pounds per ton of sulfuric acid production	40 CFR 60.83	4.7, 4.12, 4.14, 4.15
4.11	Visible emissions	10% opacity	40 CFR 60.83	2.8, 4.7, 4.12, 4.14, 4.15

Permit Limits / Standard Summary

4.1 Sulfur Dioxide Emissions from the East Sulfuric Acid Plant

The emissions from the East Sulfuric Acid Plant stack shall not exceed any emissions rate limit in Table 4.3.

Table 4.3 EMISSION LIMITS ^a

Source Description	SO ₂	
	Lb/hr ^b	Tons/yr ^c
East Sulfuric Acid Plant Stack	258	735.5

^a In absence of any other credible evidence, compliance is assured by complying with permit operating, monitoring, and record keeping requirements.

^b Pounds per hour, 3 hour rolling average, as determined by multiplying sulfuric acid production data by the CEM results required by 40 CFR 60.84, or DEQ approved alternative.

^c Tons per 12 month rolling average (any 12 consecutive months).

[PTC No. P-2010.0002, 3/25/10]

4.2 Rules for Control of Sulfur Oxide Emissions from Sulfuric Acid Plants

No person shall allow, suffer, cause or permit the operation of any sulfuric acid plant which emits sulfur oxides (SO_x) into the atmosphere in excess of twenty-eight (28) pounds per ton of 100% sulfuric acid produced in accordance with IDAPA 58.01.01.845-847.

[IDAPA 58.01.01.845-847, 4/5/00]

4.3 PM - Process Weight PM Emissions Limitations

No person shall emit into the atmosphere from any process or process equipment commencing operation on or after October 1, 1979, particulate matter in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour.

a. If PW is less than 9,250 lb/hr,

$$E = 0.045(PW)^{0.6}$$

b. If PW is equal to or greater than 9,250 lb/hr,

$$E = 1.10(PW)^{0.25}$$

[IDAPA 58.01.01.701, 4/5/00]

Operating Requirements

4.4 Production Rate Limit

The East Sulfuric Acid Plant shall have a maximum daily production rate of 1,550 tons per day as 100% sulfuric acid.

[PTC No. P-2010.0002, 3/25/10]

Monitoring & Recordkeeping Requirements

4.5 Demonstration of Compliance with the SO₂ Pound Per Hour and Ton Per Year Limits

The permittee shall:

- Each hour calculate and record the three-hour rolling average SO₂ emissions in pounds per hour as the product of pounds of SO₂ per ton of 100% H₂SO₄ and tons of 100% H₂SO₄ produced (each hour calculate arithmetic average of the proceeding three-hour period);
- Each calendar month calculate and record SO₂ emissions in tons per year based on the 12 month rolling average (12 consecutive months).
- All three-hour running average sulfur dioxide emissions shall be reported to DEQ in a calendar-quarterly report. The report shall be received by DEQ no later than 30 days after each calendar quarter. All repairs or changes to the continuous emission monitoring system and any calibration problem shall be reported to DEQ within 7 days and shall be included in the quarterly report.

[PTC No. P-2010.0002, 3/25/10]

4.6 Production Monitoring

Each day, the permittee shall monitor and record the production of the East Sulfuric Acid Plant in ton/day of 100% sulfuric acid.

[PTC No. P-2010.0002, 3/25/10]

Performance Testing Requirements

- 4.7 Sulfur dioxide and sulfuric acid mist emission tests shall be performed at least once during each 13-month period using EPA Reference Methods 1, 2, 3, and 8, or DEQ approved alternative methods. The tests shall be performed to conduct a monitoring system performance evaluation of the SO₂ CEMS as described in Permit Condition 4.13 and to demonstrate compliance with the limits in Permit Conditions 4.10 and 4.11. All emission tests shall be performed in accordance with IDAPA 58.01.01.157 with the exception that all source testing shall be conducted in accordance with a written and DEQ approved protocol. Visible emissions shall be observed and recorded during the emissions tests using EPA Reference Method 9. A minimum of 24 observations shall be recorded. The production rate in tons of 100% H₂SO₄ per hour (T/hr) shall be recorded during each performance test; the production rate shall be included in each test report.

[IDAPA 58.01.01.322.09, 5/1/94; PTC No. P-2010.0002, 3/25/10]

PTC General Provision

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

[PTC No. P-2010.0002, 3/25/10]

NSPS Requirements – 40 CFR 60 Subpart H

4.9 NSPS 40 CFR 60 Subpart H – Standard for Sulfur Dioxide

The owner or operator shall not cause to be discharged into the atmosphere from the East Sulfuric Acid Plant any gases which contain sulfur dioxide in excess of 2 kg per metric ton of acid produced (4 pounds per ton), the production being expressed as 100% H₂SO₄, in accordance with 40 CFR

60.82(a). Periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standards, in accordance with 40 CFR 60.84(e).

[40 CFR 60.82(a) and 60.84(e)]

4.10 NSPS 40 CFR 60 Subpart H – Standard for Acid Mist

Sulfuric acid mist emissions from the East Sulfuric Acid Plant shall not exceed 0.15 lb per ton of 100% sulfuric acid production in accordance with 40 CFR 60.83(a)(1) as determined by using the test methods and procedures specified in 40 CFR 60.85.

[40 CFR 60.83(a)(1) and 60.85]

4.11 NSPS 40 CFR 60 Subpart H – Standard for Opacity

Visible emission limits from the East Sulfuric Acid Plant shall not exceed 10% opacity in accordance with 40 CFR 60.83(a)(2).

[40 CFR 60.83(a)(2)]

4.12 NSPS 40 CFR 60 Subpart A – Excess Emissions

Emissions in excess of the level of the applicable NSPS emission limits during periods of startup, shutdown, and malfunction shall not be considered a violation of the applicable emission limit, in accordance with 40 CFR 60.8(c).

[40 CFR 60.8(c)]

4.13 NSPS 40 CFR 60 Subpart H – Emission Monitoring with CEMS

In accordance with 40 CFR 60.84(a), a continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated by the owner or operator. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be sulfur dioxide (SO₂). Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the SO₂ portion of the Method 8 results shall be used. The span value shall be set at 1000 ppm of SO₂.

- A conversion factor shall be established for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lb/ton). The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of sulfur dioxide entering the converter using suitable methods (e.g., the Reich test, National Air Pollution Control Administration Publication No. 999-AP-13) and calculating the appropriate conversion factor for each 8-hour period in accordance with 40 CFR 60.84(b).
- In accordance with 40 CFR 60.84(c), the owner or operator shall record all conversion factors and values under 40 CFR 60.84(b) from which they were computed (i.e., CF, r, and s).
- Alternatively, a source that processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen may use the continuous emission monitoring approach and calculation procedures in determining SO₂ emission rates in terms of the standard in accordance with 40 CFR 60.84(d).
- In accordance with 40 CFR 60.84(e), for the purpose of reports under 40 CFR 60.7(c), periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standards under 40 CFR 60.82.

[40 CFR 60.84]

4.14 Should there be a conflict between Permit Conditions 4.9 - 4.13 and 40 CFR 60 Subpart H, 40 CFR 60 Subpart H shall govern, including any amendments to that regulation.

[PTC No. P-2010.0002, 3/25/10]

4.15 **NSPS 40 CFR 60 Subpart A – General Provisions**

The owner or operator shall comply with the requirements of the general provisions in 40 CFR 60 Subpart A of the New Source Performance Standards (NSPS). Generally applicable reporting, record keeping and notification requirements of Subpart A are included in the table in Appendix C of this permit. These summaries are provided to highlight the notification and record keeping requirements of 40 CFR 60 for affected facilities, and are not intended to be a comprehensive listing of all general provisions requirements that may apply. Should there be a conflict between these summaries and the NSPS, the NSPS shall govern.

[40 CFR 60 Subpart A]

5. NEBRASKA BOILER (B-5)

Summary Description

The following is a narrative description of the B-5 Nebraska boiler regulated in this Tier I operating permit as described in PTC No. 029-00003 issued on July 26, 1995.

The "B-5" gas-fired boiler generates steam for the production of phosphoric acid. The B-5 boiler must meet the following specifications, or be of equivalent design subject to DEQ approval:

Manufacturer: Nebraska Boiler Company
 Model Number: NSX-G-107-ECON
 Rated Heat Input: 213.8 MMBtu/hr
 Steam Capacity: 175,000 lb/hr
 Fuel: Natural gas

[PTC No. 029-00003, 7/26/95]

Table 5.1 describes the devices used to control emissions from the Nebraska boiler.

Table 5.1 EMISSIONS UNITS AND EMISSIONS CONTROL DEVICES

Source Code	Emission Unit(s) / Process(es)	Emission Control Device
S-Nb-1	Nebraska boiler (B-5)	Low NO _x package boiler

Table 5.2 contains only a summary of the requirements that apply to the B-5 Nebraska boiler. Specific permit requirements are listed below Table 5.2.

Table 5.2 APPLICABLE REQUIREMENTS SUMMARY

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Operating, Monitoring and Recordkeeping Requirements
5.1	NO _x emissions	0.20 lb/MMBtu	40 CFR 60.44b (1)	5.1.1, 5.1.2, 5.7 - 5.14, 5.16 - 5.20
5.2	NO _x emissions PM emissions PM ₁₀ emissions SO ₂ emissions CO emissions VOC emissions	16.84 lb/hr, 70.71 T/yr 1.05 lb/hr, 4.42 T/yr 1.05 lb/hr, 4.42 T/yr 0.13 lb/hr, 0.53 T/yr 8.42 lb/hr, 35.4 T/yr 0.36 lb/hr, 1.50 T/yr	PTC No. 029-00003, 7/7/95	5.4, 5.5, 5.6, 5.12.(2), 5.15, 5.21, 5.22
5.3	PM	0.015 gr/dscf corrected to 3% oxygen	IDAPA 58.01.01.677	5.5, 5.21

¹ If any requirement in this permit conflicts with any requirement contained in 40 CFR 60 the requirement in 40 CFR 60 shall control.

Permit Limits / Standard Summary

5.1 NSPS 40 CFR 60 Subpart Db – NO_x Emission Limit

The permittee shall not cause to be discharged into the atmosphere from the B-5 boiler any gases that contain NO_x (expressed as NO₂) in excess of 0.20 lb/MMBtu in accordance 40 CFR 60.44b(a)(1).

[40 CFR 60.44b(a)]

- 5.1.1 Compliance with the emission limit under 40 CFR 60.44b(a) is determined on a 30-day rolling average basis in accordance 40 CFR 60.44b(i). [40 CFR 60.44b(i)]
- 5.1.2 For purposes of applying 40 CFR 60.44b(i), the NO_x standard under 40 CFR 60.44b(a) applies at all times including periods of startup, shutdown, or malfunction. [40 CFR 60.44b(h) and 60.46b(a)]
- 5.2 The PM, PM₁₀, SO₂, NO_x, CO and VOC emissions from the B-5 boiler exhaust stack shall not exceed any corresponding emission limit listed in Table 5.3. [PTC No. 029-00003, 7/7/95]

Table 5.3 EMISSION LIMITS

Source Description	PM		PM ₁₀		SO ₂		NO _x		VOC		CO	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
B-5 Boiler	1.05	4.42	1.05	4.42	0.13	0.53	16.84	70.71	0.36	1.50	8.42	35.4

5.3 PM Emission Limit for Fuel Burning Equipment

The PM emissions shall not exceed the grain-loading emission limit of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for natural gas.

[IDAPA 58.01.01.677, 5/1/94]

Operating Requirements

- 5.4 The boiler shall be equipped with a COEN low-NO_x burner, or a DEQ-approved equivalent for the control of NO_x emissions. [PTC No. 029-00003, 8/14/96]
- 5.5 The B-5 boiler shall only use natural gas as fuel. [PTC No. 029-00003, 7/7/95]
- 5.6 The B-5 boiler shall not burn more than 1,768,000,000 scf of natural gas fuel per year. [PTC No. 029-00003, 7/7/95]

Monitoring & Recordkeeping Requirements

5.7 NSPS 40 CFR 60 Subpart Db – Standard for Sulfur Dioxide (SO₂)

Units firing only natural gas are exempt from the SO₂ emissions limit in 40 CFR 60.42b in accordance with 40 CFR 60.42b(k)(2). The owner or operator seeking to demonstrate compliance in 40 CFR 60.42b(k)(2) shall follow the applicable procedures in 40 CFR 60.49b(r) in accordance with 40 CFR 60.45b(k).

[40 CFR 60.45b(k)]

- 5.7.1 The owner or operator that is demonstrating compliance under 60.45b(k) is not subject to the SO₂ emission monitoring requirements under 40 CFR 60.47b(a) if fuel records are maintained as described in 40 CFR 60.49b(r). [40 CFR 60.47b(f)]

5.8 NSPS 40 CFR 60 Subpart Db – Compliance and Performance Test Methods/Procedures for NO_x

5.8.1 Compliance with the NO_x emission standards under 40 CFR 60.44b shall be determined through performance testing under 40 CFR 60.46b(e).

[40 CFR 60.46b(c)]

5.8.2 40 CFR 60.8 specifies that at such times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s). In accordance with 40 CFR 60.46b(e), when such a test is required to determine compliance with the NO_x emission limits under 40 CFR 60.44b, the owner or operator shall conduct the performance test as required under 40 CFR 60.8 using the continuous system for monitoring nitrogen oxides under 40 CFR 60.48(b), and as follows:

In accordance with 40 CFR 60.46b(e)(4), the owner or operator shall upon request determine compliance with the NO_x standards under 40 CFR 60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, nitrogen oxides emissions data collected pursuant to 40 CFR 60.48b(g)(1) or 40 CFR 60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NO_x emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_x emission data for the preceding 30 steam generating unit operating days.

[40 CFR 60.8, 60.46b(e), and 60.46b(e)(4)]

5.9 NSPS 40 CFR 60 Subpart Db – Emission Monitoring for NO_x

The owner or operator shall:

- (1) Comply with the provisions of 40 CFR 60.48b(b) through 40 CFR 60.48b(f), or
- (2) Monitor steam generating unit operating conditions and predict NO_x emission rates as specified in a plan submitted pursuant to 40 CFR 60.49b(c).

[40 CFR 60.48b(g)]

5.10 If compliance with the NO_x standard of 40 CFR 60.44b is demonstrated through the monitoring of steam generating unit operating conditions under the provisions of 40 CFR 60.48b(g)(2), records shall be maintained of predicted NO_x emission rates and the monitored operating conditions, including steam generating unit load, identified in the approved plan in accordance with 40 CFR 60.49b(c).

[40 CFR 60.49b(c)]

5.11 The permittee shall record and maintain records of the amount of fuel combusted during each day and calculate the annual capacity factor for natural gas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

[40 CFR 60.49b(d)(1)]

5.12 The permittee shall maintain records of the following information for each steam generating unit operating day in accordance with 40 CFR 60.49b(g):

- (1) Calendar date;
- (2) The average hourly NO_x emission rates (expressed as NO₂) in lb/MMBtu heat input and lb/hr measured or predicted;

- (3) The 30-day average NO_x emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from measured or predicted hourly NO_x emission rates for the preceding 30 steam generating unit operating days;
- (4) Identification of boiler operating days when the calculated 30-day average NO_x emission rates are in excess of the NO_x emissions standard under 40 CFR 60.44b, with the reasons for such excess emissions as well as a description of the corrective actions taken;
- (5) Identification of the boiler operating days for which NO_x data have not been obtained, including the reasons for not obtaining sufficient data and a description of the correction actions taken;
- (6) Identification of the times when emissions data have been excluded from the calculation of average emission rates and the reasons for excluding data;
- (7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted; and
- (8) If NO_x is measured using a CEMS under 40 CFR 60.48b(g)(1), then the requirements under 40 CFR 60.49(g)(8), (9), and (10) shall also be complied with;

[40 CFR 60.49b(g)]

5.13 All records required under 40 CFR 60.49b shall be maintained for a period of 2 years following the date of such record.

[40 CFR 60.49b(o)]

5.14 The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only natural gas shall obtain and maintain at the affected facility fuel receipts from the fuel supplier that certify that the gaseous fuel meets the definition of natural gas as defined in 40 CFR 60.41b. Reports shall be submitted to the Administrator certifying that only natural gas was combusted in the affected facility during the reporting period.

Natural gas is defined by 40 CFR 60.41b as follows:

- (1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or
- (2) Liquefied petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see 40 CFR 60.17); or
- (3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

[40 CFR 60.49b(r)]

5.15 The permittee shall monitor and record the cumulative volume of natural gas fuel consumption on a monthly basis and per each consecutive 12-month period.

[PTC No. 029-00003, 7/7/95; IDAPA 58.01.01.322.06, 5/1/94]

Reporting

- 5.16** The owner or operator of any affected facility in any category listed in Paragraphs (1) or (2) below this section is required to submit excess emission reports for any excess emissions that occurred during the reporting period.
- (1) Any affected facility subject to the operating parameter monitoring requirements under 40 CFR 60.13(i)(1) (i.e., EPA-approved alternative monitoring).
 - (2) Any affected facility that is subject to the nitrogen oxides standard of 40 CFR 60.44b, and that;
 - (i) Combusts natural gas; or
 - (ii) Has a heat input capacity of 73 MW (250 MMBtu/hr) or less and is required to monitor NO_x emissions on a continuous basis under 40 CFR 60.48b(g)(1) or steam generating unit operating conditions under 40 CFR 60.48b(g)(2).
 - (3) 40 CFR 60.49b(h)(3) is not applicable.
 - (4) If a NO_x CEMS is used to meet 40 CFR 60.48b(g)(1), the definition that applies for excess emissions is specified by 40 CFR 60.49b(h)(4).

[40 CFR 60.49b(h)]

- 5.17** The permittee shall submit reports containing the information recorded under 40 CFR 60.49(g).

[40 CFR 60.49b(i)]

- 5.18** The owner or operator of an affected facility may submit electronic quarterly reports for NO_x in lieu of submitting the written reports required under 40 CFR 60.49(h) and (i). The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.

[40 CFR 60.49b(v)]

- 5.19** The reporting period for the reports required under this subpart is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[40 CFR 60.49b(w)]

NSPS 40 CFR 60 Subpart Db – General Provisions

- 5.20** The owner or operator shall comply with the requirements of the general provisions in 40 CFR 60 Subpart A of the New Source Performance Standards (NSPS). Generally applicable reporting, record keeping and notification requirements of Subpart A are included in the table in Appendix C of this permit. These summaries are provided to highlight the notification and record keeping requirements of 40 CFR 60 for affected facilities, and are not intended to be a comprehensive listing of all general provisions requirements that may apply. Should there be a conflict between these summaries and the NSPS, the NSPS shall govern.

[40 CFR 60 Subpart A]

PTC General Provision

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

[PTC No. 029-00003, General Provision B, 7/7/95]

5.22 The performance tests will be performed at the maximum production rate. If this maximum rate is not achieved during testing, the allowable production rate will be limited to the production rate attained during testing.

[PTC No. 029-00003, General Provision F, 7/7/95]

6. PHOSPHORIC ACID AND SUPERPHOSPHORIC ACID PLANTS

Summary Description

The following is a narrative description of the phosphoric acid plant regulated in this Tier I operating permit. This description is for informational purposes only.

Phosphate rock is fed, along with water, sulfuric acid, and recycle acid, into a series of seven cells: the first five being “reactors” and the last two being “digesters”. Here it is mixed together and circulated while a chemical reaction takes place forming a slurry of phosphoric acid (approximately 30% P₂O₅) and crystals composed primarily of calcium sulfate known as phosphogypsum. The slurry is fed to a circular pan filter and two belt filters, where the 30% acid is separated from the phosphogypsum. The phosphogypsum is slurried to impoundments, commonly referred to as “gyp stacks.” The acid is concentrated using a series of nine evaporators which use steam heaters and vacuum systems with condensers to remove some of the water. This acid is stored in tanks and some of it is sold as Merchant Grade Acid (MGA, 50-58% P₂O₅) after clarification. Some of it is further upgraded to superphosphoric acid (SPA, approximately 70% P₂O₅) using special evaporators with natural gas-fired Thermanol heaters to provide the necessary high temperature needed and is then stored in other tanks. The superphosphoric acid is further upgraded by removing solids using three filters before it is loaded on trucks and railcars. Some of the intermediate grades of acid are pumped to the granulation plant for use in dry granulated fertilizer production. Emissions from the phosphoric acid plant and SPA plant are controlled by scrubbers that conform with EPA’s stringent maximum achievable control technology (MACT) standards per 40 CFR 63 Subpart AA. Nu-West’s two cooling towers (one serving the sulfuric acid plant and one serving the phosphoric acid and SPA processes) are non-contact cooling systems. No phosphogypsum pond water or wet scrubbing device liquid effluent is introduced or commingled with the cooling tower water.

Table 6.1 describes the devices used to control emissions from the wet process phosphoric acid plant.

Table 6.1 EMISSIONS UNITS AND EMISSIONS CONTROL DEVICES

Source Code	Emission Unit(s) / Process(es)	Emission Control Device
S-Pa-1	Phosphoric acid process	Multi-stage horizontal cross-flow scrubber (A-Pa-1) Conditioning vent scrubber (A-Pp-3) (TAG. No. CP-4536101)
S-Pb-1	Superphosphoric acid process	Multi-stage horizontal cross-flow scrubber (A-Pb-1)
S-Pa-2a and 2b	Thermal fluid heaters	Low NO _x package thermal heaters

Table 6.2 contains only a summary of the requirements that apply to the phosphoric acid plant. Specific permit requirements are listed below Table 6.2.

Table 6.2 APPLICABLE REQUIREMENTS SUMMARY¹

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring and Recordkeeping Requirements
6.1	Fluoride emissions from wet process phosphoric acid line	6.750 gram / metric ton of equivalent P ₂ O ₅ feed (0.01350 lb/ton)	40 CFR 63.603(a) ⁽²⁾	6.6, 6.8, 6.10, 6.11, 6.13 - 6.18, 6.20 - 6.25
6.2	Fluoride emissions from superphosphoric acid process line	4.350 gram/metric ton of equivalent P ₂ O ₅ feed (0.00870 lb/ton)	40 CFR 63.603(b) ⁽²⁾	6.6, 6.8, 6.10, 6.11, 6.13 - 6.18, 6.20 - 6.25
6.3	Fluoride emissions from Phosphoric Acid Plant	3.8 tons per year	PTC No. P-2009.0002	6.7, 6.12
6.4	Nitrogen oxide emissions from superphosphoric Acid Oxidation process	Five tons per year	PTC Condition, July 12, 2000	6.9, 6.10, 6.11, 6.19
6.5	Particulate matter	Process Weight Limitations	IDAPA 58.01.01.701	6.26

¹ As determined by a pollutant-specific EPA reference method, DEQ approved alternative, or as determined by DEQ's emissions estimation methods used in the PTC application analysis.

² If any requirement in this permit conflicts with any requirement contained in 40 CFR 63, the requirement in 40 CFR 63 shall control.

Permit Limits / Standard Summary

6.1 MACT 40 CFR 63 Subpart AA – Wet Process Phosphoric Acid Process Line Fluoride Standard

In accordance with 40 CFR 63.603(a), the owner or operator shall not cause to be discharged into the atmosphere from the Wet Process Phosphoric Acid Process Line any gases which contain total fluorides in excess of 6.750 gram/metric ton of equivalent P₂O₅ feed (0.01350 lb/ton). 40 CFR 63.601 defines a wet process phosphoric acid process line as any process line manufacturing phosphoric acid by reacting phosphate rock and acid. The Conditioning Vent Scrubber System is part of the Phosphoric Acid Production Process.

[40 CFR 63.603(a)]

6.2 MACT 40 CFR 63 Subpart AA – Superphosphoric Acid Process Line Fluoride Standard

In accordance with 40 CFR 63.603(b), the owner or operator shall not cause to be discharged into the atmosphere from the Superphosphoric Acid Process Line any gases which contain total fluorides in excess of 4.350 gram/metric ton of equivalent P₂O₅ feed (0.00870 lb/ton). 40 CFR 63.601 defines a superphosphoric acid process line as *“any process line which concentrates wet-process phosphoric acid to 66% or greater P₂O₅ by weight.”*

[40 CFR 63.603(b)]

6.3 Fluoride - Phosphoric Acid Plant

The fluoride emissions from the phosphoric acid plant shall not exceed 3.8 tons per any consecutive 12-month period.

[PTC No. P-2009.0002, 2/20/09]

6.4 NO_x - Superphosphoric Acid Oxidation Process

Emissions of NO_x from the Superphosphoric Acid Oxidation Process shall not exceed five tons per any consecutive 12-month period.

[PTC No. P-2009.0068, 10/14/10]

6.5 PM - Process Weight PM Emissions Limitations

No person shall emit into the atmosphere from any process or process equipment commencing operation on or after October 1, 1979, particulate matter in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour.

- a. If PW is less than 9,250 lb/hr,

$$E = 0.045(PW)^{0.6}$$

- b. If PW is equal to or greater than 9,250 lb/hr,

$$E = 1.10(PW)^{0.25}$$

[IDAPA 58.01.01.701, 4/5/00]

Operating Requirements

6.6 MACT 40 CFR 63 Subpart AA – Operating Requirements, Pressure Drops and Flow Rates for Wet Scrubbers

In accordance with 40 CFR 63.604, the owner/operator using a wet scrubbing emission control system must maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant to the requirements of 40 CFR 63.605(d)(1) or (2).

[40 CFR 63.604]

6.7 P₂O₅ Throughput - Phosphoric Acid Plant

The equivalent P₂O₅ feed to the phosphoric acid plant shall not exceed 560,000 tons per any consecutive 12-month period.

[PTC No. P-2009.0002, 2/20/09]

6.8 MACT 40 CFR 63 Subpart AA – Standard for Evaporative Cooling Towers

No owner or operator shall introduce into any evaporative cooling tower any liquid effluent from any wet scrubbing device installed to control emissions from process equipment, in accordance with 40 CFR 63.603(e).

[40 CFR 63.603(e)]

Monitoring & Recordkeeping Requirements

6.9 NO_x Performance Test for Superphosphoric Acid Oxidation Process

- 6.9.1 The permittee shall conduct performance tests on the Superphosphoric Acid Oxidation Process Stack to demonstrate compliance with the NO_x emission limit in Permit Condition 6.4. The permittee is encouraged to submit a source testing protocol for approval 30 days prior to conducting the performance test. The permittee shall test in accordance with IDAPA 58.01.01.157, the conditions of this permit, and Permit Condition 2.10. Permit Condition 2.10 includes notification requirements, testing procedures and reporting requirements.

- 6.9.2 The source test shall be conducted under “worst case normal” conditions as required by IDAPA 58.01.01.157 and Permit Condition 2.10 and the source test report shall contain documentation that the test was conducted under these conditions. As part of this documentation, the P₂O₅ feed rate and

the production rate of the Superphosphoric Acid Oxidation Process shall be monitored and recorded during the test.

- 6.9.3 Performance testing shall be performed according to the following schedule. If the pollutant emission rate measured in the most recent test is less than or equal to 75% of the emission standard in Permit Condition 6.4, the next test shall be conducted within five years of the test date. If the pollutant emission rate measured during the most recent performance test is greater than 75%, but less than or equal to 90%, of the emission standard in Permit Condition 6.4, the next test shall be conducted within two years of the test date (no more than 26 calendar months following the previous performance test). If the pollutant emission rate measured during the most recent performance test is greater than 90% of the emission standard in Permit Condition 6.4, the next test shall be conducted within one year of the test date (no more than 14 calendar months following the previous performance test).

[PTC No. P-2009.0068, 10/14/10]

6.10 **MACT 40 CFR 63 Subpart AA – P₂O₅ Feed Rate Monitoring Equipment**

In accordance with 40 CFR 63.605(a), the owner or operator shall install, calibrate, maintain, and operate a monitoring system which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the Wet-Process Phosphoric Acid Process Line and the Superphosphoric Acid Process Line. The monitoring system shall have an accuracy of ± 5% over its operating range.

[40 CFR 63.605(a)]

6.11 **MACT 40 CFR 63 Subpart AA – P₂O₅ Feed Rate Recordkeeping**

In accordance with 40 CFR 63.605(b)(1), the owner or operator of a Wet-Process Phosphoric Acid Process Line or Superphosphoric Acid Process Line shall maintain a daily record of equivalent P₂O₅ feed by first determining the total mass rate in metric ton/hour of phosphorus-bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of 40 CFR 63.605(a) and then proceeding according to 40 CFR 63.606(c)(3).

[40 CFR 63.605(b)(1)]

6.12 **P₂O₅ Throughput**

Each month, the permittee shall monitor and record the equivalent P₂O₅ feed to the phosphoric acid plant for the previous month and for the previous consecutive 12-month period. Monitoring of P₂O₅ feed shall be conducted in accordance with 40 CFR 63.605.

[PTC No. P-2009.0002, 2/20/09]

6.13 **MACT 40 CFR 63 Subpart AA – Monitoring Requirements, Scrubber Pressure Drop**

In accordance with 40 CFR 63.605(c)(1), each owner or operator of a Wet-Process Phosphoric Acid Process Line or Superphosphoric Acid Process Line using a wet scrubbing emission control system shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5% over its operating range.

[40 CFR 63.605(c)(1)]

6.14 MACT 40 CFR 63 Subpart AA – Monitoring Requirements, Scrubber Liquid Flow Rate

In accordance with 40 CFR 63.605(c)(2), each owner or operator of a Wet-Process Phosphoric Acid Process Line or Superphosphoric Acid Process Line using a wet scrubbing emission control system shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of $\pm 5\%$ over its operating range.

[40 CFR 63.605(c)(2)]

6.15 MACT 40 CFR 63 Subpart AA – Monitoring Requirements, Scrubber Pressure Drop and Liquid Flow Rate Ranges

In accordance with 40 CFR 63.605(d), the owner or operator of an affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in 40 CFR 63, Subpart AA must establish allowable ranges for operating parameters using the methodology specified in either (1) or (2) of this section:

- (1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is $\pm 20\%$ of the baseline average value determined as a requirement of 40 CFR 63.606(c)(4), (d)(4), or (e)(2). The Administrator retains the right to reduce the $\pm 20\%$ adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard, but, in no instance shall the adjustment be reduced to less than $\pm 10\%$. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, the owner or operator shall determine whether new allowable ranges of baseline average values will be based upon the new performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retested and the performance test results are submitted to the Administrator pursuant to 40 CFR 63.607(c)(1), 63.7(g)(1), and/or 63.10(d)(2), the owner or operator will indicate whether the operating range will be based on the new performance test or the previously established range. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.
- (2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges for the daily averages of the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with 40 CFR 63 Subpart AA. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in 40 CFR 63.606(c)(4), (d)(4), or (e)(2). As an alternative, the owner or operator can establish the allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in 40 CFR 63, Subpart AA and established in the manner required in 40 CFR 63.606(c)(4), (d)(4), or (e)(2). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges. When a source using the

methodology of this paragraph is retested, the owner or operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters outside the previously established ranges. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

[40 CFR 63.605(d)]

6.16 MACT 40 CFR 63 Subpart AA – Performance Testing

In accordance with 40 CFR 63.606(a), once per annum, the owner or operator shall conduct a performance test to demonstrate compliance with the applicable emission standards for the Wet-Process Phosphoric Acid Process Line and the Superphosphoric Acid Process Line. The owner or operator shall conduct the performance test according to the procedures in 40 CFR 63, Subpart A and in 40 CFR 63.606.

[40 CFR 63.606(a)]

6.17 MACT 40 CFR 63 Subpart AA – Performance Test Methods

In accordance with 40 CFR 63.606(b), in conducting performance tests, each owner or operator of an affected source shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A, or other methods and procedures as specified in 40 CFR 63.606, except as provided in 40 CFR 63.7(f).

[40 CFR 63.606(b)]

6.18 MACT 40 CFR 63 Subpart AA – Performance Testing - Fluorides

In accordance with 40 CFR 63.606(c), each owner or operator of a Wet-Process Phosphoric Acid Process Line or Superphosphoric Acid Process Line shall determine compliance with the applicable total fluorides standards specified in 40 CFR 63.602 and 40 CFR 63.603 as specified in 40 CFR 63.606(c).

[40 CFR 63.606(c)]

6.19 NO_x Emissions from SPA Oxidation Process

On a monthly basis, the permittee shall calculate and record the NO_x emissions from the Superphosphoric Acid Oxidation Process stack, based on an emission factor derived from NO_x performance testing conducted under Permit Condition 6.9. The emissions shall be recorded for the month and for the most recent consecutive 12 calendar month period to demonstrate compliance with the NO_x emission rate limit in Permit Condition 6.4.

[PTC No. P-2009.0068, 10/14/10]

6.20 MACT 40 CFR 63 Subpart AA – Recordkeeping Requirements

In accordance with 40 CFR 63.607(b), each owner or operator subject to the requirements of 40 CFR 63, Subpart AA shall comply with the recordkeeping requirements in 40 CFR 63.10. The requirements are included in Appendix A of this permit.

[40 CFR 63.607(b)]

Reporting

6.21 MACT 40 CFR 63 Subpart AA – Reporting Requirements

In accordance with 40 CFR 63.607(c), the owner or operator of an affected source shall comply with the reporting requirements specified in 40 CFR 63.10 as follows:

6.21.1 Performance Test Report

In accordance with 40 CFR 63.607(c)(1), as required by 40 CFR 63.10 the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance status required in 40 CFR 63.9.

[40 CFR 63.607(c)(1)]

6.21.2 Excess Emissions Report

In accordance with 40 CFR 63.607(c)(2), as required by 40 CFR 63.10 the owner or operator of an affected source shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in 40 CFR 63.10. When no exceedances of an operating parameter have occurred, such information shall be included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved, as described in 40 CFR 63.10.

[40 CFR 63.607(c)(2)]

6.21.3 Summary Report

In accordance with 40 CFR 63.607(c)(3), if the total duration of control system exceedances for the reporting period is less than 1% of the total operating time for the reporting period, the owner or operator shall submit a summary report containing the information specified in 40 CFR 63.10, rather than the full excess emissions report, unless required by the Administrator. The summary report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half.

[40 CFR 63.607(c)(3)]

6.21.4 In accordance with 40 CFR 63.607(c)(4), if the total duration of control system operating parameter exceedances for the reporting period is 1% or greater of the total operating time for the reporting period, the owner or operator shall submit a summary report and excess emissions report.

[40 CFR 63.607(c)(4)]

6.22 MACT 40 CFR 63 Subpart AA – Notification Requirements

In accordance with 40 CFR 63.607(a), each owner or operator subject to the requirements of 40 CFR 63, Subpart AA shall comply with the notification requirements in 40 CFR 63.9. The requirements are included in Appendix A of this permit.

[40 CFR 63.607(a)]

6.23 **MACT 40 CFR 63 Subpart AA – Evaporative Cooling Tower Annual Report**

In accordance with 40 CFR 63.603(e), each owner or operator of an affected source subject to the evaporative cooling tower requirements in 40 CFR 63.603(e) must certify to the Administrator annually that he/she has complied with the requirements contained in that section. This action may be completed as part of the annual Tier I permit compliance certification under General Provision 21.

[40 CFR 63.603(e)]

MACT 40 CFR 63 Subpart AA - Phosphoric Acid Manufacturing Plant Exemption From New Source Performance Standards

6.24 In accordance with 40 CFR 63.610, the affected sources at the phosphoric acid manufacturing plant that are subject to the provisions of 40 CFR 63 Subpart AA are exempted from any otherwise applicable new source performance standard contained in 40 CFR 60, Subpart T, Subpart U, or Subpart NN. To be exempt, a source must have a current operating permit pursuant to Title V of the Act and the source must be in compliance with all requirements of 40 CFR 63, Subpart AA.

[40 CFR 63.610]

MACT 40 CFR 63 Subpart AA - Applicability of General Provisions

6.25 In accordance with 40 CFR 63.608, the owner or operator shall comply with the requirements of the general provisions in 40 CFR 63, Subpart A as shown in Appendix A to 40 CFR 63, Subpart AA. Refer to the table in Appendix A of this permit.

[40 CFR 63.608]

PTC General Provision

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

[PTC No. P-2009.0068, 10/14/10]

7. GYP STACK SYSTEM

Summary Description

Phosphogypsum, a by-product of the phosphoric acid production process, is slurried to impoundments referred to as phosphogypsum stacks or "gyp stacks." The slurry is approximately 20% solids. At the gyp stacks, solids in the slurry are allowed to settle and the process water is decanted to an evaporative cooling pond. The process water is then returned to the processing plant.

The settled phosphogypsum is allowed to dry to a moisture content of about 40% by directing the slurry to a rotation of cells on the gyp stack system. When a cell has dried appropriately, the cell is excavated to build up the exterior dikes of the stack. When the interior of the cell is excavated and dikes are elevated to the necessary height, the cell is flooded with slurry again.

Table 7.1 describes the devices used to control emissions from the gyp stacks.

Table 7.1 EMISSIONS UNITS AND EMISSIONS CONTROL DEVICES

Source Code	Emission Unit/Process	Emission Control Device
F-GYP-0	125-acre Gyp Stack (Includes Cells 1, 2/3, and # 3 Tailings Pond (TP3))	Reasonable control of fugitive emissions
F-GYP-1	125-acre West Gyp Stack I	Reasonable control of fugitive emissions
F-GYP-2	125-acre West Gyp Stack II	Reasonable control of fugitive emissions

Table 7.2 contains only a summary of the requirements that apply to the gyp stacks. Specific permit requirements are listed below Table 7.2.

Table 7.2 APPLICABLE REQUIREMENTS SUMMARY

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring and Recordkeeping Requirements
7.1.1	Fluoride	200 lb/day and 14.6 T/yr after completing construction of F-GYP-2	PTC No. P-2009.0002	7.1.3, 7.3.1, 7.5.1, 7.5.3, 7.6
7.1.2	Fluoride	200 lb/day and 36.5 T/yr prior to completing construction of F-GYP-2	PTC No. P-2009.0002	7.1.3, 7.3.2, 7.5.2, 7.5.3
7.2	Radon -222 from a closed stack	20 pCi/(m ² -sec) ¹	40 CFR 61.202	7.4, 7.7, 7.8, 7.9

¹If any requirement in this permit conflicts with any requirement contained in 40 CFR 61 the requirement in 40 CFR 61 shall control.

Permit Limits / Standard Summary

7.1 Gyp Stack System Emission Limits - Fluoride

7.1.1 Upon completion of construction of F-GYP-2, the combined emissions of fluoride (F) from the three 125-acre gyp stacks (F-GYP-0, F-GYP-1 and F-GYP-2) shall not exceed 200 pounds per day and 14.6 tons per any consecutive rolling 12-month period. For purposes of meeting the requirements of this permit, Cells 1, 2/3 and the No. 3 Tailings Pond (TP3) are all included within the boundaries of, and are a part of, F-GYP-0.

7.1.2 Prior to completion of construction of F-GYP-2, the combined emissions of fluoride (F) from the two 125-acre gyp stacks (F-GYP-0 and F-GYP-1) shall not exceed 200 pounds per day and 36.5 tons per

any consecutive rolling 12-month period. After construction of F-GYP-2 is completed, Permit Conditions 7.1.2 and 7.1.3 no longer apply.

- 7.1.3 For purposes of compliance with Permit Conditions 7.1, 7.3 and 7.5, construction of the new gyp stack (F-GYP-2) shall include placement of at least two feet of compacted gyp atop the 60 mil HDPE composite liner membrane and compacted clay to ensure adequate liner integrity. At that point, process water will be introduced and when fully displaced by gyp slurry in both cells of F-GYP-2, the construction process shall be deemed complete.

[PTC No. P-2009.0002, 2/20/09]

7.2 Radon - Phosphogypsum Stacks

Each person who generates phosphogypsum shall place all phosphogypsum in stacks. Phosphogypsum may be removed from a phosphogypsum stack only as expressly provided by 40 CFR 61, Subpart R. After a phosphogypsum stack has become an inactive stack, the owner or operator shall assure that the stack does not emit more than 20 pCi/(m²-sec) (1.9 pCi/(ft²-sec)) of radon-222 into the air in accordance with 40 CFR 61.202.

An inactive stack is defined by 40 CFR 61.201 as “a stack to which no further routine additions of phosphogypsum will be made and which is no longer used for water management associated with the production of phosphogypsum. If a stack has not been used for either purpose for two years, it is presumed to be inactive.”

[40 CFR 61.201 and 61.202]

Operating Requirements

7.3 Gyp Stack System Area Limits

- 7.3.1 Upon completion of construction of F-GYP-2, the combined visible liquid layer surface area of the ponds within the three 125-acre gyp stacks (F-GYP-0, F-GYP-1, and F-GYP-2) shall not exceed 50 acres on a 12-month rolling average basis.

- 7.3.2 Prior to completion of construction of F-GYP-2, the combined visible liquid layer surface area of the ponds within the two 125-acre gyp stacks (F-GYP-0 and F-GYP-1) shall not exceed 125 acres. After construction of F-GYP-2 is completed, Permit Condition 7.3.2 no longer applies.

[PTC No. P-2009.0002, 2/20/09]

7.4 Distribution and Use of Phosphogypsum

- 7.4.1 Phosphogypsum may be lawfully removed from a stack and distributed for use in outdoor agricultural research and development, agricultural field use, and indoor research and development activities, only in accordance with 40 CFR 61.204 and 61.205. Certification requirements shall also be complied with in accordance with 40 CFR 61.208.

[40 CFR 61.204, 61. 205, and 61.208]

- 7.4.2 Phosphogypsum may not be lawfully removed from a stack and distributed or used for any purpose not expressly specified in 40 CFR 61.204 or 40 CFR 61.205 without prior EPA approval in accordance with 40 CFR 61.206. Certification requirements shall also be complied with in accordance with 40 CFR 61.208.

[40 CFR 61.206 and 61.208]

- 7.4.3 Before removing phosphogypsum from a stack for distribution in commerce pursuant to 40 CFR 61.204 or 40 CFR 61.206, the owner or operator of a phosphogypsum stack shall comply with the

sampling and measurement procedures in accordance with 40 CFR 61.207. Records shall be maintained in accordance with 40 CFR 61.209(b).

[40 CFR 61.207 and 61.209(b)]

Monitoring & Recordkeeping Requirements

7.5 Gyp Stack System Area Monitoring

7.5.1 Upon completion of construction of F-GYP-2, on a twice-monthly basis (the first and third full calendar week of each month), Nu-West shall measure and record, in acres, the combined visible liquid layer surface area of each of the ponds within the three 125-acre gyp stacks. Monitoring and recordkeeping procedures for performing this measurement shall be included in a Water Management and Monitoring Plan. For purposes of demonstrating compliance using the Water Management and Monitoring Plan, the term "visible liquid layer surface area" as used in Permit Condition 7.3 shall mean that observable surface area that is covered with a visible layer of liquid (standing or flowing) within the Gyp Stack system ponds. The Water Management and Monitoring Plan is incorporated by reference into this permit and shall be maintained on-site and made available to DEQ representatives upon request.

Compliance with the 50-acre limit in Permit Condition 7.3 shall be based on a rolling 12-month average of the twice-monthly observations.

Compliance with the daily emission limit in Permit Condition 7.1 shall be demonstrated based on each of the individual observations.

7.5.2 Prior to completion of construction of F-GYP-2, once per year the permittee shall measure and record, in acres, the combined visible liquid layer surface area of each of the ponds within the two 125-acre gyp stacks (F-GYP-0 and F-GYP-1). After construction of F-GYP-2 is completed, Permit Condition 7.5.2 no longer applies.

7.5.3 If the Water Management and Monitoring Plan (Plan) is changed, a copy of the revised Plan shall be sent to DEQ at the address listed in Section 1 of this permit.

[PTC No. P-2009.0002, 2/20/09]

7.6 NSR Projected Emissions Records for the F-GYP-2 Gyp Stack Project; 52.21(r)(6)

The permittee shall maintain records and provide reports as follows for the project to construct gyp stack F-GYP-2 in accordance with IDAPA 58.01.01.205.01 [40 CFR 52.21(r)(6) and (7)]:

- 7.6.1 In accordance with 40 CFR 52.21(r)(6)(i), before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:
- (a) A description of the project;
 - (b) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (i.e., gyp stacks); and
 - (c) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under 40 CFR 52.21(b)(41)(ii)(c) and an explanation for why such amount was excluded, and any netting calculations, if applicable.
- 7.6.2 In accordance with 40 CFR 52.21(r)(6)(iii), the owner or operator shall monitor the emissions of fluoride from the emissions units listed in Permit Condition 7.6.1; and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 10 years following resumption of regular operations after the change.

7.6.3 In accordance with 40 CFR 52.21(r)(6)(v), the owner or operator shall submit a report to DEQ and the EPA Administrator if the annual emissions, in tons per year, from the project identified under Permit Condition 7.6.1, exceed the baseline actual emissions (as documented and maintained pursuant to Permit Condition 7.6.1(c)), by a significant amount (as defined in 40 CFR 52.21(b)(23)) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to Permit Condition 7.6.1(c). Such report shall be submitted to DEQ and the EPA Administrator within 60 days after the end of such year. The report shall contain the following:

- (a) The name, address and telephone number of the major stationary source;
- (b) The annual emissions as calculated pursuant to 40 CFR 52.21(r)(6)(iii); and
- (c) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).

7.6.4 In accordance with 40 CFR 52.21(r)(7), the owner or operator of the source shall make the information required to be documented and maintained pursuant to 40 CFR 52.21(r)(6) available for review upon a request for inspection by the Administrator or the general public pursuant to the requirements contained in 40 CFR 70.4(b)(3)(viii).

7.6.5 Written procedures to demonstrate compliance with Permit Condition 7.6 shall be included in the Water Management and Monitoring Plan, including the required records maintenance activities.
[40 CFR 52.21(r)(6) and 52.21(r)(7); PTC No. P-2009.0002, 2/20/09]

7.7 Radon Monitoring and Compliance Procedures

Within 60 days following the date on which a stack becomes an inactive stack, each owner or operator of an inactive phosphogypsum stack shall test the stack for radon-222 flux in accordance with the procedures described in 40 CFR part 61, Appendix B, Method 115. DEQ and EPA shall be notified at least 30 days prior to each such emissions test so that DEQ and EPA may, at its option, observe the test. The radon monitoring and compliance procedures shall be conducted in accordance with 40 CFR 61.203.

[40 CFR 61.203]

7.8 Required Records

7.8.1 In accordance with 40 CFR 61.209(a), records shall be maintained for each stack documenting the procedure used to verify compliance with the flux standard in 40 CFR 61.202.

[40 CFR 61.209(a)]

7.8.2 Each facility which uses phosphogypsum pursuant to 40 CFR 61.205 or 40 CFR 61.206 shall prepare records in accordance with 40 CFR 61.209(c).

[40 CFR 61.209(c)]

Applicability of NESHAP General Provisions

7.9 The owner or operator shall comply with the requirements of the general provisions in 40 CFR 61 Subpart A. Refer to the table in Appendix D of this permit.

[40 CFR 61 Subpart A]

Compliance Schedule

7.10 Nu-West is not in compliance at the time of issuance of the Tier I operating permit with the applicable requirements for sources listed in Permit Conditions 7.10.1. through 7.10.1.3. To bring the facility into compliance with the applicable requirements in 40 CFR Part 61 Subparts A and R, the permittee shall comply with the specific elements of the compliance schedule as summarized in Table 7.3 and as specified in Permit Conditions 7.10.3 through 7.10.6.

Table 7.3 COMPLIANCE SCHEDULE SUMMARY

Permit Conditions	Milestone	Deadline	Documentation / Reporting
7.10.2	Collect and move all phosphogypsum currently located outside the perimeter of the Gyp Stack System and place all phosphogypsum in stacks (i.e., in F-GYP-0, F-GYP-1 and/or F-GYP-2).	Completion by December 31, 2011 unless an extension of time is approved	Copy of progress report sent from Nu-West to DEQ under Permit Condition 7.10.5.
7.10.3	Provide DEQ a copy of EPA's approval for the project to modify Gyp Stack F-GYP-0 in 1998	December 31, 2011	Copy of EPA approval document
7.10.4	Provide DEQ a copy of EPA's approval for the project to construct Gyp Stack F-GYP-1 in 2005	December 31, 2011	Copy of EPA approval document
7.10.5	Submit semiannual progress reports	Provide reports semiannually	Copy of report sent from Nu-West to DEQ

7.10.1 DEQ identified the following sources as sources that are not in compliance with the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61, Subpart A (General Provisions) or Subpart R (National Emission Standards for Radon Emissions from Phosphogypsum Stacks):

7.10.1.1 Some phosphogypsum exists outside of the boundaries of the Gyp Stack System (e.g., in the berms of Tailings Ponds 1 and 2 (TP1 and TP2), and the roads for old gyp stacks (F-GYP-0) access and F-GYP-0 boundary encroachment areas). The placement of this phosphogypsum is not in accordance with 40 CFR 61.202.

7.10.1.2 In 1998, Gyp Stack F-GYP-0 was modified by converting one of the cells (Tailings Pond 3) in F-GYP-0 into a gyp stack. An application for written approval of this project has been submitted to the EPA in accordance with 40 CFR 61.07. Documentation of EPA's approval of this application is required to show compliance with 40 CFR 61.05(a) and 40 CFR 61.08.

7.10.1.3 In 2005, Gyp Stack F-GYP-1 was constructed. An application for written approval of this project has been submitted to the EPA in accordance with 40 CFR 61.07. Documentation of EPA's approval of this application is required to show compliance with 40 CFR 61.05(a) and 40 CFR 61.08.

[IDAPA 58.01.01.322.10, 4/5/00]

7.10.2 In accordance with IDAPA 58.01.01.322.10.a.i., the permittee shall commence collection and movement of phosphogypsum currently located outside the perimeter of the Gyp Stack System and shall place all phosphogypsum in stacks (i.e., F-GYP-0, F-GYP-1 and/or F-GYP-2). Completion of this action will demonstrate compliance with the requirements under 40 CFR 61.202. Unless an extension is granted by DEQ and EPA, the permittee shall complete such phosphogypsum movement and consolidation by no later than December 31, 2011.

[IDAPA 58.01.01.322.10.a.i, 4/5/00]

7.10.3 No later than December 31, 2011, the permittee shall provide documentation of the approval under 40 CFR 61.08 by EPA Region 10 for the project to modify Gyp Stack F-GYP-0 in 1998 by converting Tailings Pond 3 (TP3) into a gyp stack cell.

[IDAPA 58.01.01.322.10.a.i, 4/5/00]

7.10.4 No later than December 31, 2011, the permittee shall provide documentation of the approval under 40 CFR 61.08 by EPA Region 10 for the project to construct Gyp Stack F-GYP-1 in 2005.

[IDAPA 58.01.01.322.10.a.i, 4/5/00]

7.10.5 The permittee shall submit periodic progress reports to the Department no less frequently than every six months in accordance with IDAPA 58.01.01.322.10.a.ii. Any progress report shall include a statement of when the milestones and compliance were or will be achieved, an explanation of why any dates in the compliance schedule submitted by the applicant or in terms or conditions of the Tier I operating permit were not or will not be met and a detailed description of any preventative or corrective measures undertaken by the permittee in accordance with IDAPA 58.01.01.322.10.a.iii. Progress reports are no longer required after the requirements specified in Permit Conditions 7.10.1 through 7.10.4 have been complied with.

[IDAPA 58.01.01.322.10.a.ii and iii, 5/1/94]

7.10.6 The terms and conditions regarding the compliance schedule are supplemental to, and do not sanction noncompliance with, the underlying applicable requirements in 40 CFR 61 Subpart R in accordance with IDAPA 58.01.01.322.10.a.v.

[IDAPA 58.01.01.322.10.a.v, 5/1/94]

8. CLEAVER-BROOKS BOILER

Summary Description

The following is a narrative description of the Cleaver-Brooks boiler regulated in this Tier I operating permit. This description is for informational purposes only.

The Cleaver-Brooks boiler supplies steam for facility operations. The boiler's heat input rate is 180 MMBtu/hr and the steam-generating capacity is approximately 150,000 pounds per hour. Refer Table 1.1 for additional specifications.

Table 8.1 describes the devices used to control emissions from the Cleaver-Brooks boiler.

Table 8.1 EMISSIONS UNITS AND EMISSIONS CONTROL DEVICES

Source Code	Emission Unit(s)/Process(es)	Emission Control Device
A-Cb-1	Cleaver-Brooks boiler	Low-NO _x package boiler

Table 8.2 contains only a summary of the requirements that apply to the Cleaver-Brooks boiler. Specific permit requirements are listed below Table 8.2.

Table 8.2 APPLICABLE REQUIREMENTS SUMMARY

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring and Recordkeeping Requirements
8.1	Nitrogen oxide emissions	33 T/yr	PTC No. P-2009.0068	8.4, 8.6, 8.9, 8.10, 8.13, 8.19
8.2	Nitrogen oxide emissions	0.10 lb/MMBtu heat input to the boiler at a low heat release rate	40 CFR 60.44b(a)(1) and 60.44b(l)(2) ⁽¹⁾	8.5 - 8.12, 8.14 - 8.18
8.3	Particulate matter	0.015 gr/dscf corrected to 3% oxygen	IDAPA 58.01.01.676	8.4, 8.19

¹If any requirement in this permit conflicts with any requirement contained in 40 CFR 60 the requirement in 40 CFR 60 shall govern.

Permit Limits / Standard Summary

8.1 NO_x Emission Limit

The NO_x emissions from the boiler stack shall not exceed 33 T/yr. As determined by a pollutant-specific EPA reference method, DEQ-approved alternative, or as determined by DEQ's emission estimation methods used in the PTC application analysis.

[PTC No. P-2009.0068, 10/14/10]

8.2 NSPS 40 CFR 60 Subpart Db – NO_x Emission Limit

The permittee shall not cause any gases that contain nitrogen oxides (expressed as NO₂) to be discharged into the atmosphere in excess of 0.10 pounds per million Btu (0.10 lb/MMBtu) heat input to the boiler in accordance with 60.44b(a)(1) and 40 CFR 60.44b(l)(2).

[40 CFR 60.44b(a)(1); 40 CFR 60.44b(l)(2)]

8.2.1 Compliance with the emission limit under 40 CFR 60.44b is determined on a 30-day rolling average basis in accordance with 40 CFR 60.44b(i).

[40 CFR 60.44b(i)]

8.2.2 For purposes of applying 40 CFR 60.44b(i), the NO_x standard under 40 CFR 60.44b applies at all times including periods of startup, shutdown, or malfunction in accordance with 40 CFR 60.44b(h) and 60.46b(a).

[40 CFR 60.44b(h) and 60.46b(a)]

8.3 **PM Emission Limit for Fuel Burning Equipment**

The PM emissions shall not exceed the grain loading emission limit of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for combustion of natural gas in accordance with IDAPA 58.01.01.676.

[IDAPA 58.01.01.676, 5/1/94]

Operating Requirements

8.4 **Fuel Specification**

The boiler shall use only natural gas as fuel.

[PTC No. P-2009.0068, 10/14/10]

Monitoring & Recordkeeping Requirements

8.5 **NSPS 40 CFR 60 Subpart Db – Standard for Sulfur Dioxide (SO₂)**

Units firing only natural gas are exempt from the SO₂ emissions limit in 40 CFR 60.42b in accordance with 40 CFR 60.42b(k)(2). The owner or operator seeking to demonstrate compliance in 40 CFR 60.42b(k)(2) shall follow the applicable procedures in 40 CFR 60.49b(r) in accordance with 40 CFR 60.45b(k).

[40 CFR 60.45b(k)]

8.5.1 In accordance with 40 CFR 60.47b(f), the owner or operator that is demonstrating compliance under 60.45b(k) is not subject to the SO₂ emission monitoring requirements under 40 CFR 60.47b(a) if fuel records are maintained as described in 40 CFR 60.49b(r).

[40 CFR 60.47b(f)]

8.6 **NSPS 40 CFR 60 Subpart Db – Compliance and Performance Test Methods and Procedures for NO_x**

8.6.1 In accordance with 40 CFR 60.46b(c), compliance with the NO_x emission standards under 40 CFR 60.44b shall be determined through performance testing under 40 CFR 60.46b(e).

[40 CFR 60.46b(c)]

8.6.2 40 CFR 60.8 specifies that at such times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s). In accordance with 40 CFR 60.46b(e), when such a test is required to determine compliance with the NO_x emission limits under 40 CFR 60.44b, the owner or operator shall conduct the performance test as required under 40 CFR 60.8 using the continuous system for monitoring nitrogen oxides under 40 CFR 60.48(b), and as follows:

In accordance with 40 CFR 60.46b(e)(4), the owner or operator shall upon request determine compliance with the NO_x standards under 40 CFR 60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, nitrogen oxides emissions data collected pursuant to 40 CFR 60.48b(g)(1) or 40 CFR 60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NO_x emission standards. A new 30-day rolling average

emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_x emission data for the preceding 30 steam generating unit operating days.

[40 CFR 60.8, 60.46b(e), and 60.46b(e)(4)]

8.7 NSPS 40 CFR 60 Subpart Db – Emission Monitoring for NO_x

In accordance with 40 CFR 60.48b(g), the owner or operator shall:

- (1) Comply with the provisions of 40 CFR 60.48b(b) through 40 CFR 60.48b(f), or
- (2) Monitor steam generating unit operating conditions and predict NO_x emission rates as specified in a plan submitted pursuant to 40 CFR 60.49b(c).

[40 CFR 60.48b(g)]

8.8 If compliance with the NO_x standard of 40 CFR 60.44b is demonstrated through the monitoring of steam generating unit operating conditions under the provisions of 40 CFR 60.48b(g)(2), records shall be maintained of predicted NO_x emission rates and the monitored operating conditions, including steam generating unit load, identified in the approved plan in accordance with 40 CFR 60.49b(c).

[40 CFR 60.49b(c)]

8.9 In accordance with 40 CFR 60.49b(d)(1), the permittee shall record and maintain records of the amount of fuel combusted during each day and calculate the annual capacity factor for natural gas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

[40 CFR 60.49b(d)(1)]

8.10 The permittee shall maintain records of the following information for each steam generating unit operating day in accordance with 40 CFR 60.49b(g):

- (1) Calendar date;
- (2) The average hourly NO_x emission rates (expressed as NO₂) in lb/MMBtu heat input measured or predicted;
- (3) The 30-day average NO_x emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from measured or predicted hourly NO_x emission rates for the preceding 30 steam generating unit operating days;
- (4) Identification of boiler operating days when the calculated 30-day average NO_x emission rates are in excess of the NO_x emissions standard under 40 CFR 60.44b, with the reasons for such excess emissions as well as a description of the corrective actions taken;
- (5) Identification of the boiler operating days for which NO_x data have not been obtained, including the reasons for not obtaining sufficient data and a description of the correction actions taken;
- (6) Identification of the times when emissions data have been excluded from the calculation of average emission rates and the reasons for excluding data;
- (7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted; and
- (8) If NO_x is measured using a CEMS under 40 CFR 60.48b(g)(1), then the requirements under 40 CFR 60.49b(g)(8), (9), and (10) shall also be complied with.

[40 CFR 60.49b(g)]

8.11 In accordance with 40 CFR 60.49b(o), all records required under 40 CFR 60.49b shall be maintained for a period of 2 years following the date of such record.

[40 CFR 60.49b(o)]

- 8.12** In accordance with 40 CFR 60.49b(r), the owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only natural gas shall obtain and maintain at the affected facility fuel receipts from the fuel supplier that certify that the gaseous fuel meets the definition of natural gas as defined in 40 CFR 60.41b. Reports shall be submitted to the Administrator certifying that only natural gas was combusted in the affected facility during the reporting period.

Natural gas is defined by 40 CFR 60.41b as follows:

- (1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or
- (2) Liquefied petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see 40 CFR 60.17); or
- (3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

[40 CFR 60.49b(r)]

8.13 **NO_x Annual Emission Rate Monitoring**

On a monthly basis, using the testing and monitoring records obtained under Permit Conditions 8.6, 8.9 and 8.10 the permittee shall record the NO_x emissions from the Cleaver Brooks boiler in units of tons per month and tons per consecutive 12-month period to demonstrate compliance with Permit Condition 8.1.

[IDAPA 58.01.01.322.06 and 07, 5/1/94; PTC No. P-2009.0068, 10/14/10]

Reporting

- 8.14** In accordance with 40 CFR 60.49b(h), the owner or operator of any affected facility in any category listed in Paragraphs (1) or (2) below this section is required to submit excess emission reports for any excess emissions that occurred during the reporting period.

- (1) Any affected facility subject to the operating parameter monitoring requirements under 40 CFR 60.13(i)(1) (i.e., EPA-approved alternative monitoring).
- (2) Any affected facility that is subject to the nitrogen oxides standard of 40 CFR 60.44b, and that;
 - (i) Combusts natural gas; or
 - (ii) Has a heat input capacity of 73 MW (250 MMBtu/hr) or less and is required to monitor NO_x emissions on a continuous basis under 40 CFR 60.48b(g)(1) or steam generating unit operating conditions under 40 CFR 60.48b(g)(2).
- (3) 40 CFR 60.49b(h)(3) is not applicable.
- (4) If a NO_x CEMS is used to meet 40 CFR 60.48b(g)(1), the definition that applies for excess emissions is specified by 40 CFR 60.49b(h)(4).

[40 CFR 60.49b(h)]

- 8.15** In accordance with 40 CFR 60.49b(i), the permittee shall submit reports containing the information recorded under 40 CFR 60.49(g).

[40 CFR 60.49b(i)]

8.16 In accordance with 40 CFR 60.49b(v), the owner or operator of an affected facility may submit electronic quarterly reports for NO_x in lieu of submitting the written reports required under 40 CFR 60.49(h) and (i). The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.

[40 CFR 60.49b(v)]

8.17 In accordance with 40 CFR 60.49b(w), the reporting period for the reports required under this subpart is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[40 CFR 60.49b(w)]

NSPS 40 CFR 60 Subpart Db – General Provisions

8.18 The owner or operator shall comply with the requirements of the general provisions in 40 CFR 60 Subpart A of the New Source Performance Standards (NSPS). Generally applicable reporting, record keeping and notification requirements of Subpart A are included in the table in Appendix C of this permit. These summaries are provided to highlight the notification and record keeping requirements of 40 CFR 60 for affected facilities, and are not intended to be a comprehensive listing of all general provisions requirements that may apply. Should there be a conflict between these summaries and the NSPS, the NSPS shall govern.

[40 CFR 60 Subpart A]

PTC General Provisions

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

[PTC No. P-2009.0068, 10/14/10]

9. EMERGENCY IC ENGINE

Summary Description

The diesel-fired emergency standby IC engine powers an electrical generator. The IC engine is used exclusively for emergency purposes, is operated less than 500 hours per year, and is fueled by diesel fuel. Therefore, the IC engine is only subject to generally applicable State of Idaho air permit requirements per IDAPA 58.01.01.222.01.d. In addition, the IC engine is subject to NESHAP Subpart ZZZZ.

Table 9.1 describes the devices used to control emissions from the emergency IC engine powering an electrical generator.

Table 9.1 EMISSIONS UNITS AND EMISSIONS CONTROL DEVICES

Emissions Unit / Process	Emissions Control Device
Caterpillar model 3512 DITA 1,545 bhp diesel-fired emergency standby IC engine installed in 1995	N/A

Table 9.2 contains only a summary of the requirements that apply to the emergency IC engine powering an electrical generator. Specific permit requirements are listed below Table 9.2.

Table 9.2 APPLICABLE REQUIREMENTS SUMMARY

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Operating and Monitoring and Recordkeeping Requirements
9.3	Operational requirements	Limits on annual operations	NESHAP Subpart ZZZZ	2.11

40 CFR 63 Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

General Requirements

9.1 Affected Source - 40 CFR 63.6590, What parts of my plant does this subpart cover?

In accordance with 40 CFR 63.6590, the engine is an existing stationary RICE located at a major source of HAP emissions.

[40 CFR 63.6590]

Operating Requirements

9.2 Emergency IC Engine Operating Requirements

In accordance with 40 CFR 63.6640 for the Emergency IC Engine the Permittee shall meet the following requirements:

- There is no time limit on the use of the emergency IC engine in emergency situations.
- The permittee may operate the emergency IC engine for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of the emergency IC engine should be minimized, but there is no time limit on the use in emergency situations and for routine testing and maintenance.
- The permittee may operate the emergency IC engine for an additional 50 hours per year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for the facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 CFR 63.6640(2)]

9.3 Incorporation of Federal Requirements by Reference

Unless expressly provided otherwise, any reference in this permit to any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of that document for the purposes of the reference, including any notes and appendices therein. Documents include, but are not limited to:

- National Emission Standards for Hazardous Air Pollutants (NESHAP) Area Sources, 40 CFR Part 63, Subpart ZZZZ - National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

For permit conditions referencing or cited in accordance with any document incorporated by reference (including permit conditions identified as NESHAP), should there be any conflict between the requirements of the permit condition and the requirements of the document, the requirements of the document shall govern, including any amendments to that regulation.

10. INSIGNIFICANT ACTIVITIES

Activities and emission units identified as insignificant under IDAPA 58.01.01.317.01(b) are listed in the Table 9.1 to qualify for a permit shield.

Table 9.1. INSIGNIFICANT EMISSIONS UNITS

Description	Insignificant Activities IDAPA 58.01.01.317.01(b)(i) Citation
One 2,000-gallon gasoline storage tank One 250-gallon diesel fuel storage tank Three 500-gallon portable diesel fuel storage tanks One 1,000-gallon diesel fuel storage tank One 2,000-gallon diesel fuel storage tank One 1,200-gallon diesel fuel storage tank One 500-gallon 10W oil storage tank One 250-gallon 30W oil storage tank One 500-gallon 30W oil storage tank One 250-gallon antifreeze storage tank One 1,900-gallon used oil storage tank One 10,000-gallon dust suppressant storage tank One 17,000-gallon dust suppressant storage tank	3
One 250-gallon propane storage tank Two 500-gallon propane storage tanks	4
Combustion sources, less than 5 MMBtu/hr, exclusively using natural gas, butane, propane, and/or LPG	5
Welding not using more than 1 T/day of welding rod	9
An industrial water chlorination system utilizing compress chlorine gas with a daily maximum treatment capacity engineered for 576,000 gpd	16
Space heaters and hot water heaters using natural gas, propane or kerosene and generating less than 5 MMBtu/hr	18
Tanks and pumping equipment for storage and dispensing of acids not greater than 99% H ₂ SO ₄ or H ₃ PO ₄ exist at the facility.	19
Therminol® 55 Heat Transfer Fluid is the HBPOM used at the facility (Boiling range: 335°C to 390°C at 760 mm; Reid vapor pressure: 0.16 psi at 100°F	20
Rolling of cold metal not exceeding 48 inches wide and ½-inch thick	23
2 Hartzell natural gas-fired building air heaters rated at 5.2 MMBtu/hr	30
Ore unloading and transfer (F-Oa-1)	30
Ore storage to wash plant (F-Ob-1)	30
Wash plant and grinding mills (S-W-1, S-W-2)	30
SW and NE Sand Storage Piles	30
Molten sulfur railcar unloading	30

- 10.1** There are no monitoring, recordkeeping, or reporting requirements for insignificant emission units or activities beyond those required in the Facility-wide Permit Conditions.

11. TIER I OPERATING PERMIT GENERAL PROVISIONS

General Compliance

1. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application.
[IDAPA 58.01.01.322.15.a, 5/1/94; 40 CFR 70.6(a)(6)(i)]
2. It shall not be a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the terms and conditions of this permit.
[IDAPA 58.01.01.322.15.b, 5/1/94; 40 CFR 70.6(a)(6)(ii)]
3. Any permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.
[IDAPA 58.01.01.315.01, 5/1/94; 40 CFR 70.5(b)]

Reopening

4. This permit may be revised, reopened, revoked and reissued, or terminated for cause. Cause for reopening exists under any of the circumstances listed in IDAPA 58.01.01.386. Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable in accordance with IDAPA 58.01.01.360 through 369.
[IDAPA 58.01.01.322.15.c, 5/1/94; IDAPA 58.01.01.386, 3/19/99; 40 CFR 70.7(f)(1) and (2); 40 CFR 70.6(a)(6)(iii)]
5. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[IDAPA 58.01.01.322.15.d, 5/1/94; 40 CFR 70.6(a)(6)(iii)]

Property Rights

6. This permit does not convey any property rights of any sort, or any exclusive privilege.
[IDAPA 58.01.01.322.15.e, 5/1/94; 40 CFR 70.6(a)(6)(iv)]

Information Requests

7. The permittee shall furnish all information requested by DEQ, within a reasonable time, that DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
[Idaho Code §39-108; IDAPA 58.01.01.122 (4/5/00) and 322.15.f (4/5/00); 40 CFR 70.6(a)(6)(v)]
8. Upon request, the permittee shall furnish to DEQ copies of records required to be kept by this permit. For information claimed to be confidential, the permittee may furnish such records along with a claim of confidentiality in accordance with Idaho Code §39-342A and applicable implementing regulations including IDAPA 58.01.01.128.
[IDAPA 58.01.01.322.15.g, 5/1/94; IDAPA 58.01.01.128, 4/5/00; 40 CFR 70.6(a)(6)(v)]

Severability

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.

[IDAPA 58.01.01.322.15.h, 5/1/94; 40 CFR 70.6(a)(5)]

Changes Requiring Permit Revision or Notice

10. The permittee may not commence construction or modification of any stationary source, facility, major facility, or major modification without first obtaining all necessary permits to construct or an approval under IDAPA 58.01.01.213, or complying with IDAPA 58.01.01.220 through 223. The permittee shall comply with IDAPA 58.01.01.380 through 386 as applicable.

[IDAPA 58.01.01.200-223, 4/2/08; IDAPA 58.01.01.322.15.i, 3/19/99;
IDAPA 58.01.01.380-386, 7/1/02; 40 CFR 70.4(b)(12), (14) and (15), and 70.7(d) and (e)]

11. Changes that are not addressed or prohibited by the Tier I operating permit require a Tier I operating permit revision if such changes are subject to any requirement under Title IV of the CAA, 42 USC Section 7651 through 7651c, or are modifications under Title I of the CAA, 42 USC Section 7401 through 7515. Administrative amendments (IDAPA 58.01.01.381), minor permit modifications (IDAPA 58.01.01.383), and significant permit modifications (IDAPA 58.01.01.382) require a revision to the Tier I operating permit. IDAPA 58.01.01.502(b)(10) changes are authorized in accordance with IDAPA 58.01.01.384. Off-permit changes and required notice are authorized in accordance with IDAPA 58.01.01.385.

[IDAPA 58.01.01.381-385, 7/1/02; IDAPA 58.01.01.209.05, 4/5/00;
40 CFR 70.4(b)(14) and (15)]

Federal and State Enforceability

12. Unless specifically identified as a “State-only” provision, all terms and conditions in this permit, including any terms and conditions designed to limit a source’s potential to emit, are enforceable: (i) by DEQ in accordance with state law; and (ii) by the United States or any other person in accordance with federal law.

[IDAPA 58.01.01.322.15.j, 5/1/94; 40 CFR 70.6(b)(1) and (2)]

13. Provisions specifically identified as a “State-only” provision are enforceable only in accordance with state law. “State-only” provisions are those that are not required under the Federal Clean Air Act or under any of its applicable requirements or those provisions adopted by the state prior to federal approval.

[Idaho Code §39-108; IDAPA 58.01.01.322.15.k, 3/23/98]

Inspection and Entry

14. Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:
- 14.1 Enter upon the permittee’s premises where a Tier I source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
- 14.2 Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- 14.3 Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and

- 14.4 As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.
[Idaho Code §39-108; IDAPA 58.01.01.322.15.l, 5/1/94; 40 CFR 70.6(c)(2)]

New Requirements During Permit Term

15. The permittee shall comply with applicable requirements that become effective during the permit term on a timely basis.
[IDAPA 58.01.01.322.10, 4/6/05; IDAPA 58.01.01.314.10.a.ii, 5/1/94; 40 CFR 70.6(c)(3) citing 70.5(c)(8)]

Fees

16. The owner or operator of a Tier I source shall pay annual registration fees to DEQ in accordance with IDAPA 58.01.01.387 through IDAPA 58.01.01.397.
[IDAPA 58.01.01.322.15.n, 7/1/02; 40 CFR 70.6(a)(7)]

Certification

17. All documents submitted to DEQ shall be certified in accordance with IDAPA 58.01.01.123 and comply with IDAPA 58.01.01.124.
[IDAPA 58.01.01.322.15.o, 5/1/94; 40 CFR 70.6(a)(3)(iii)(A); 40 CFR 70.5(d)]

Renewal

18. The owner or operator of a Tier I source shall submit an application to DEQ for a renewal of this permit at least six months before, but no earlier than 18 months before, the expiration date of this operating permit. To ensure that the term of the operating permit does not expire before the permit is renewed, the owner or operator is encouraged to submit a renewal application nine months prior to the date of expiration.
[IDAPA 58.01.01.313.03, 4/5/00; 40 CFR 70.5(a)(1)(iii)]
- 18.1 If a timely and complete application for a Tier I operating permit renewal is submitted, but DEQ fails to issue or deny the renewal permit before the end of the term of this permit, then all the terms and conditions of this permit including any permit shield that may have been granted pursuant to IDAPA 58.01.01.325 shall remain in effect until the renewal permit has been issued or denied.
[IDAPA 58.01.01.322.15.p, 5/1/94; 40 CFR 70.7(b)]

Permit Shield

19. Compliance with the terms and conditions of the Tier I operating permit, including those applicable to all alternative operating scenarios and trading scenarios, shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
- 19.1 Such applicable requirements are included and are specifically identified in the Tier I operating permit; or
- 19.1.1 DEQ has determined that other requirements specifically identified are not applicable and all of the criteria set forth in IDAPA 58.01.01.325.01(b) have been met.

- 19.2 The permit shield shall apply to permit revisions made in accordance with IDAPA 58.01.01.381.04 (administrative amendments incorporating the terms of a permit to construct), IDAPA 58.01.01.382.04 (significant modifications), and IDAPA 58.01.01.384.03 (trading under an emissions cap).
- 19.3 Nothing in this permit shall alter or affect the following:
 - 19.3.1 Any administrative authority or judicial remedy available to prevent or terminate emergencies or imminent and substantial dangers;
 - 19.3.2 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - 19.3.3 The applicable requirements of the acid rain program, consistent with 42 U.S.C. Section 7651(g)(a); and
 - 19.3.4 The ability of EPA to obtain information from a source pursuant to Section 114 of the CAA; or the ability of DEQ to obtain information from a source pursuant to Idaho Code §39-108 and IDAPA 58.01.01.122.
[Idaho Code §39-108 and 112; IDAPA 58.01.01.122, 4/5/00; IDAPA 58.01.01.322.15.m, 325,5/1/94; IDAPA 58.01.01.381.04, 382.04, 383.05, 384.03, 385.03, 3/19/99; 40 CFR 70.6(f)]

Compliance Schedule and Progress Reports

- 20. For each applicable requirement for which the source is not in compliance, the permittee shall comply with the compliance schedule incorporated in this permit.
 - 20.1 For each applicable requirement that will become effective during the term of this permit and that provides a detailed compliance schedule, the permittee shall comply with such requirements in accordance with the detailed schedule.
 - 20.2 For each applicable requirement that will become effective during the term of this permit that does not contain a more detailed schedule, the permittee shall meet such requirements on a timely basis.
 - 20.3 For each applicable requirement with which the permittee is in compliance, the permittee shall continue to comply with such requirements.
[IDAPA 58.01.01.322.10, 4/5/00; IDAPA 58.01.01.314.9, 5/1/94; IDAPA 58.01.01.314.10, 4/5/00; 40 CFR 70.6(c)(3) and (4)]

Periodic Compliance Certification

- 21. The permittee shall submit compliance certifications during the term of the permit for each emissions unit to DEQ and the EPA as follows:
 - 21.1 The permittee's reporting period for annual compliance certifications for all emissions units shall be from January 1 to December 31 of each year. The compliance certifications shall be submitted to DEQ and a copy of all compliance certifications shall be submitted to the EPA within 30 days of the end of the specified reporting period;
 - 21.2 The compliance certification for each emissions unit shall address all of the terms and conditions contained in the Tier I operating permit that are applicable to such emissions unit including emissions limitations, standards, and work practices;

- 21.3 The compliance certification shall be in an itemized form providing the following information (provided that the identification of applicable information may cross-reference the permit or previous reports as applicable):
- 21.3.1 The identification of each term or condition of the Tier I operating permit that is the basis of the certification;
- 21.3.2 The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period. Such methods and other means shall include, at a minimum, the methods and means required by this Tier I operating permit;
- 21.3.3 The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in Paragraph 21.3.2 above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR 64 occurred; and
- 21.3.4 Such other facts as DEQ may require to determine the compliance status of the source.
[IDAPA 58.01.01.322.11, 4/6/05; 40 CFR □ 70.6(c)(5)(iii) as amended, 62 Fed. Reg. 54900, 54946, 10/22/97; 40 CFR 70.6(c)(5)(iv)]

False Statements

22. No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.
[IDAPA 58.01.01.125, 3/23/98]

No Tampering

23. No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.
[IDAPA 58.01.01.126, 3/23/98]

Annual and Semiannual Monitoring Reports

24. In addition to all applicable reporting requirements identified in this permit, the permittee shall submit reports of any required monitoring at least every six months. The permittee's semiannual reporting periods shall be from January 1 to June 30 and from July 1 to December 31. All instances of deviations from this operating permit's requirements must be clearly identified in the report. The semiannual reports shall be submitted to DEQ within 30 days of the end of the specified reporting period.
[IDAPA 58.01.01.322.15.q, 3/23/98; IDAPA 58.01.01.322.08.c, 4/5/00; 40 CFR 70.6(a)(3)(iii)]

Reporting Deviations and Excess Emissions

25. The permittee shall promptly report all deviations from permit requirements including upset conditions, their probable cause, and any corrective actions or preventive measures taken. For excess emissions, the report shall be made in accordance with IDAPA 58.01.01.130-136. For all other deviations, the report shall be made in accordance with IDAPA 58.01.01.322.08.c, unless otherwise specified in this permit.
[IDAPA 58.01.01.322.15.q, 3/23/98; IDAPA 58.01.01.133-135, 4/5/00; 40 CFR 70.6(a)(3)(iii);

Permit Revision Not Required

26. No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit.

[IDAPA 58.01.01.322.05.b, 4/5/00; 40 CFR 70.6(a)(8)]

Emergency

27. In accordance with IDAPA 58.01.01.332, an “emergency” as defined in IDAPA 58.01.01.008, constitutes an affirmative defense to an action brought for noncompliance with such technology-based emissions limitation if the conditions of IDAPA 58.01.01.332.02 are met.

[IDAPA 58.01.01.332.01, 4/5/00; 40 CFR 70.6(g)]

11. APPENDIX A – 40 CFR 63 SUBPART A REQUIREMENTS FOR SUBPART AA

In accordance with 40 CFR 63.608, the requirements of the general provisions in 40 CFR 63 Subpart A that are applicable to the owner or operator subject to the requirements of 40 CFR 63 Subpart AA (National Emission Standards for Hazardous Air Pollutants from Phosphoric Acid Plants) are shown in the table below. Provided below is a copy of the table referenced by 40 CFR 63.608 which is current as of the time of issuance of this permit. Where DEQ has provided a reprint of an applicable federal regulation, in the case of any discrepancy or conflict between the reprint and the Code of Federal Regulations (CFR), the requirement in the CFR shall control.

Table 11.1 Appendix A to Subpart AA of Part 63- Applicability of General Provisions (40 CFR Part 63 Subpart A) to Subpart AA

40 CFR citation	Requirement	Applies to Subpart AA	Comment
63.1(a)(1) through (4)	General Applicability	Yes.	
63.1(a)(5)		No	[Reserved].
63.1(a)(6) through (8)		Yes.	
63.1(a)(9)		No	[Reserved].
63.1(a)(10) through (14)		Yes.	
63.1(b)	Initial Applicability Determination	Yes.	
63.1(c)(1)	Applicability After Standard Established	Yes.	
63.1(c)(2)		Yes.	Some plants may be area sources.
63.1(c)(3)		No	[Reserved].
63.1(c)(4) and (5)		Yes.	
63.1(d)		No	[Reserved].
63.1(e)	Applicability of Permit Program	Yes.	
63.2	Definitions	Yes.	Additional definitions in §63.601.
63.3	Units and Abbreviations	Yes.	
63.4(a)(1) through (3)	Prohibited Activities	Yes.	
63.4(a)(4)		No	[Reserved].
63.4(a)(5)		Yes.	
63.4(b) and (c)	Circumvention/Severability	Yes.	
63.5(a)	Construction/Reconstruction Applicability	Yes.	
63.5(b)(1)	Existing, New, Reconstructed Sources Requirements	Yes.	
63.5(b)(2)		No	[Reserved].
63.5(b)(3) through (6)		Yes.	
63.5(c)		No	[Reserved].

40 CFR citation	Requirement	Applies to Subpart AA	Comment
63.5(d)	Application for Approval of Construction/ Reconstruction	Yes.	
63.5(e)	Approval of Construction/Reconstruction	Yes.	
63.5(f)	Approval of Construction/Reconstruction Based on State Review	Yes.	
63.6(a)	Compliance with Standards and Maintenance Applicability	Yes.	
63.6(b)(1) through (5)	New and Reconstructed Sources Dates	Yes.	See also §63.609.
63.6(b)(6)		No	[Reserved].
63.6(b)(7)		Yes.	
63.6(c)(1)	Existing Sources Dates	Yes.	§63.609 specifies dates.
63.6(c)(2)		Yes.	
63.6(c)(3) and (4)		No	[Reserved].
63.6(c)(5)		Yes.	
63.6(d)		No	[Reserved].
63.6(e)(1) and (2)	Operation & Maintenance Requirements	Yes	
63.6(e)(3)	Startup, Shutdown, and Malfunction Plan	Yes	
63.6(f)	Compliance with Emission Standards	Yes	
63.6(g)	Alternative Standard	Yes.	
63.6(h)	Compliance with Opacity/VE Standards	No	Subpart AA does not include VE/opacity standards.
63.6(i)(1) through (14)	Extension of Compliance	Yes.	
63.6(i)(15)		No	[Reserved].
63.6(i)(16)		Yes.	
63.6(j)	Exemption from Compliance	Yes.	
63.7(a)	Performance Test Requirements Applicability	Yes.	§63.609(a) applies rather than §63.7(a)(2)(iii).
63.7(b)	Notification	Yes.	
63.7(c)	Quality Assurance/Test Plan	Yes.	
63.7(d)	Testing Facilities	Yes.	
63.7(e)	Conduct of Tests	Yes.	§§63.604 and 63.605 specify additional requirements.
63.7(f)	Alternative Test Method	Yes.	
63.7(g)	Data Analysis	Yes.	
63.7(h)	Waiver of Tests	Yes.	
63.8(a)(1)	Monitoring Requirements Applicability	Yes.	
63.8(a)(2)		No	Subpart AA does not require CMS performance

40 CFR citation	Requirement	Applies to Subpart AA	Comment
			specifications.
63.8(a)(3)		No	[Reserved].
63.8(a)(4)		Yes.	
63.8(b)	Conduct of Monitoring	Yes.	
63.8(c)(1) through (4)	CMS Operation/Maintenance	Yes.	
63.8(c)(5) through (8)		No	Subpart AA does not require COMS/CEMS or CMS performance specifications.
63.8(d)	Quality Control	Yes.	
63.8(e)	CMS Performance Evaluation	No	Subpart AA does not require CMS performance evaluations
63.8(f)(1) through (5)	Alternative Monitoring Method	Yes.	
63.8(f)(6)	Alternative to RATA Test	No	Subpart AA does not require CEMS.
63.8(g)(1)	Data Reduction	Yes.	
63.8(g)(2)		No	Subpart AA does not require COMS or CEMS
63.8(g)(3) through (5)		Yes.	
63.9(a)	Notification Requirements Applicability	Yes.	
63.9(b)	Initial Notifications	Yes.	
63.9(c)	Request for Compliance Extension	Yes.	
63.9(d)	New Source Notification for Special Compliance Requirements	Yes.	
63.9(e)	Notification of Performance Test	Yes.	
63.9(f)	Notification of VE/Opacity Test	No	Subpart AA does not include VE/opacity standards.
63.9(g)	Additional CMS Notifications	No	Subpart AA does not require CMS performance evaluation, COMS, or CEMS.
63.9(h)(1) through (3)	Notification of Compliance Status	Yes.	
63.9(h)(4)		No	[Reserved].
63.9(h)(5) and (6)		Yes.	
63.9(i)	Adjustment of Deadlines	Yes.	
63.9(j)	Change in Previous Information	Yes.	
63.10(a)	Recordkeeping/Reporting-Applicability	Yes.	
63.10(b)	General Recordkeeping Requirements	Yes.	
63.10(c)(1)	Additional CMS Recordkeeping	Yes.	
63.10(c)(2) through (4)		No	[Reserved].

40 CFR citation	Requirement	Applies to Subpart AA	Comment
63.10(c)(5)		Yes.	
63.10(c)(6)		No	Subpart AA does not require CMS performance specifications.
63.10(c)(7) and (8)		Yes.	
63.10(c)(9)		No	[Reserved].
63.10(c)(10) through (13)		Yes.	
63.10(c)(14)		No	Subpart AA does not require a CMS quality control program.
63.10(c)(15)		Yes.	
63.10(d)(1)	General Reporting Requirements	Yes.	
63.10(d)(2)	Performance Test Results	Yes.	
63.10(d)(3)	Opacity or VE Observations	No	Subpart AA does not include VE/opacity standards.
63.10(d)(4) and (5)	Progress Reports/Startup, Shutdown, and Malfunction Reports	Yes.	
63.10(e)(1) and (2)	Additional CMS Reports	No	Subpart AA does not require CEMS or CMS performance evaluations.
63.10(e)(3)	Excess Emissions/CMS Performance Reports	Yes.	§63.606(c)(2) includes additional requirements. A CMS performance report is not required.
63.10(e)(4)	COMS Data Reports	No	Subpart AA does not require COMS.
63.10(f)	Recordkeeping/Reporting Waiver	Yes.	
63.11(a)	Control Device Requirements Applicability	Yes.	
63.11(b)	Flares	No	Flares not applicable.
63.12	State Authority and Delegations	Yes.	
63.13	Addresses	Yes.	
63.14	Incorporation by Reference	Yes.	
63.15	Information Availability/Confidentiality	Yes.	

12. APPENDIX B – 40 CFR 63 SUBPART A REQUIREMENTS FOR SUBPART BB

In accordance with 40 CFR 63.628, the requirements of the general provisions in 40 CFR 63 Subpart A of this part that are applicable to the owner or operator subject to the requirements of 40 CFR 63 Subpart BB (National Emission Standards for Hazardous Air Pollutants from Phosphate Fertilizers Production Plants) are shown in the table below. Provided below is a copy of the table referenced by 40 CFR 63.628 which is current as of the time of issuance of this permit. Where DEQ has provided a reprint of an applicable federal regulation, in the case of any discrepancy or conflict between the reprint and the Code of Federal Regulations (CFR), the requirement in the CFR shall control.

Table 12.1 Appendix A to Subpart BB of Part 63- Applicability of General Provisions (40 CFR Part 63 Subpart A) to Subpart BB

40 CFR citation	Requirement	Applies to Subpart BB	Comment
63.1(a)(1) through (4)	General Applicability	Yes.	
63.1(a)(5)		No	[Reserved].
63.1(a)(6) through (8)		Yes.	
63.1(a)(9)		No	[Reserved].
63.1(a)(10) through (14)		Yes.	
63.1(b)	Initial Applicability Determination	Yes.	
63.1(c)(1)	Applicability After Standard Established	Yes.	
63.1(c)(2)		Yes	Some plants may be area sources.
63.1(c)(3)		No	[Reserved].
63.1(c)(4) and (5)		Yes	
63.1(d)		No	[Reserved].
63.1(e)	Applicability of Permit Program	Yes.	
63.2	Definitions	Yes	Additional definitions in §63.621.
63.3	Units and Abbreviations	Yes.	
63.4(a)(1) through (3)	Prohibited Activities	Yes.	
63.4(a)(4)		No	[Reserved].
63.4(a)(5)		Yes.	
63.4(b) and (c)	Circumvention/Severability	Yes.	
63.5(a)	Construction/Reconstruction Applicability	Yes.	
63.5(b)(1)	Existing, New, Reconstructed Sources Requirements	Yes.	
63.5(b)(2)		No	[Reserved].
63.5(b)(3) through (6)		Yes.	
63.5(c)		No	[Reserved].
63.5(d)	Application for Approval of Construction/Reconstruction	Yes.	
63.5(e)	Approval of Construction/Reconstruction	Yes.	

40 CFR citation	Requirement	Applies to Subpart BB	Comment
63.5(f)	Approval of Construction/Reconstruction Based on State Review	Yes.	
63.6(a)	Compliance with Standards and Maintenance Applicability	Yes.	
63.6(b)(1) through (5)	New and Reconstructed Sources Dates	Yes	See also §63.629.
63.6(b)(6)		No	[Reserved].
63.6(b)(7)		Yes.	
63.6(c)(1)	Existing Sources Dates	Yes	§63.629 specifies dates.
63.6(c)(2)		Yes.	
63.6(c)(3) and (4)		No	[Reserved].
63.6(c)(5)		Yes.	
63.6(d)		No	[Reserved].
63.6(e)(1) and (2)	Operation & Maintenance Requirements	Yes	
63.6(e)(3)	Startup, Shutdown, and Malfunction Plan	Yes	
63.6(f)	Compliance with Emission Standards	Yes	
63.6(g)	Alternative Standard	Yes.	
63.6(h)	Compliance with Opacity/VE Standards	No	Subpart BB does not include VE/opacity standards.
63.6(i)(1) through (14)	Extension of Compliance	Yes.	
63.6(i)(15)		No	[Reserved].
63.6(i)(16)		Yes.	
63.6(j)	Exemption from Compliance	Yes.	
63.7(a)	Performance Test Requirements Applicability	Yes	§63.629(a) applies rather than §63.7(a)(2)(iii).
63.7(b)	Notification	Yes.	
63.7(c)	Quality Assurance/Test Plan	Yes.	
63.7(d)	Testing Facilities	Yes.	
63.7(e)	Conduct of Tests	Yes	§§63.624 and 63.625 specify additional requirements.
63.7(f)	Alternative Test Method	Yes.	
63.7(g)	Data Analysis	Yes.	
63.7(h)	Waiver of Tests	Yes.	
63.8(a)(1)	Monitoring Requirements Applicability	Yes.	
63.8(a)(2)		No	Subpart BB does not require CMS performance specifications.
63.8(a)(3)		No	[Reserved].
63.8(a)(4)		Yes.	

40 CFR citation	Requirement	Applies to Subpart BB	Comment
63.8(b)	Conduct of Monitoring	Yes.	
63.8(c)(1) through (4)	CMS Operation/Maintenance	Yes.	
63.8(c)(5) through (8)		No	Subpart BB does not require COMS/CEMS or CMS performance specifications.
63.8(d)	Quality Control	Yes.	
63.8(e)	CMS Performance Evaluation	No	Subpart BB does not require CMS performance evaluations.
63.8(f)(1) through (5)	Alternative Monitoring Method	Yes.	
63.8(f)(6)	Alternative to RATA Test	No	Subpart BB does not require CEMS.
63.8(g)(1)	Data Reduction	Yes.	
63.8(g)(2)		No	Subpart BB does not require COMS or CEMS.
63.8(g)(3) through (5)		Yes.	
63.9(a)	Notification Requirements Applicability	Yes.	
63.9(b)	Initial Notifications	Yes.	
63.9(c)	Request for Compliance Extension	Yes.	
63.9(d)	New Source Notification for Special Compliance Requirements	Yes.	
63.9(e)	Notification of Performance Test	Yes.	
63.9(f)	Notification of VE/Opacity Test	No	Subpart BB does not include VE/opacity standards.
63.9(g)	Additional CMS Notifications	No	Subpart BB does not require CMS performance evaluation, COMS, or CEMS.
63.9(h)(1) through (3)	Notification of Compliance Status	Yes.	
63.9(h)(4)		No	[Reserved].
63.9(h)(5) and (6)		Yes.	
63.9(i)	Adjustment of Deadlines	Yes.	
63.9(j)	Change in Previous Information	Yes.	
63.10(a)	Recordkeeping/Reporting-Applicability	Yes.	
63.10(b)	General Recordkeeping Requirements	Yes.	
63.10(c)(1)	Additional CMS Recordkeeping	Yes.	
63.10(c)(2) through (4)		No	[Reserved].
63.10(c)(5)		Yes.	
63.10(c)(6)		No	Subpart BB does not require CMS performance specifications.
63.10(c)(7) and (8)		Yes.	

40 CFR citation	Requirement	Applies to Subpart BB	Comment
63.10(c)(9)		No	[Reserved].
63.10(c)(10) through (13)		Yes.	
63.10(c)(14)		No	Subpart BB does not require a CMS quality control program.
63.10(c)(15)		Yes.	
63.10(d)(1)	General Reporting Requirements	Yes.	
63.10(d)(2)	Performance Test Results	Yes.	
63.10(d)(3)	Opacity or VE Observations	No	Subpart BB does not include VE/opacity standards.
63.10(d)(4) and (5)	Progress Reports/Startup, Shutdown, and Malfunction Reports	Yes.	
63.10(e)(1) and (2)	Additional CMS Reports	No	Subpart BB does not require CEMS or CMS performance evaluations.
63.10(e)(3)	Excess Emissions/CMS Performance Reports	Yes	§63.626(c)(2) includes additional requirements. A CMS performance report is not required.
63.10(e)(4)	COMS Data Reports	No	Subpart BB does not require COMS.
63.10(f)	Recordkeeping/Reporting Waiver	Yes.	
63.11(a)	Control Device Requirements Applicability	Yes.	
63.11(b)	Flares	No	Flares not applicable.
63.12	State Authority and Delegations	Yes	Authority for approval of site-specific test plans for GTSP storage buildings is retained (see §63.628(a)).
63.13	Addresses	Yes.	
63.14	Incorporation by Reference	Yes.	
63.15	Information Availability/Confidentiality	Yes.	

13. APPENDIX C – 40 CFR 60 SUBPART A REQUIREMENTS

Generally applicable reporting, record keeping and notification requirements of Subpart A of the New Source Performance Standards (NSPS, 40 CFR 60) are included in the table below. These summaries are provided to highlight the notification and record keeping requirements of 40 CFR 60 for affected facilities, and are not intended to be a comprehensive listing of all general provisions requirements that may apply. Should there be a conflict between these summaries and the NSPS, the NSPS shall govern. The table applies to affected facilities addressed in Sections 4, 5, and 8 of this permit that are subject to the requirements of 40 CFR 60 Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units) and Subpart H (Standards of Performance for Sulfuric Acid Plants). The permittee is encouraged to read all of 40 CFR 60 Subpart A. The CFRs are available on-line at: <http://www.gpoaccess.gov/cfr/index.html>.

Table 13.1 NSPS Subpart A (40 CFR 60) Summary of General Provisions for Affected Facilities

Section	Section Title	Summary of Section Requirements		
60.4	Address	<p>All requests, reports, applications, and other communications shall be submitted to:</p> <table border="0"> <tr> <td data-bbox="732 684 1024 821">Director Air and Waste Office EPA Region 10 Air Operating Permits, OAQ-107 1200 Sixth Avenue Seattle, WA 98101</td> <td data-bbox="1081 684 1451 821">Air Quality Permit Compliance Department of Environmental Quality Pocatello Regional Office 444 Hospital Way, #300 Pocatello, ID 83201</td> </tr> </table>	Director Air and Waste Office EPA Region 10 Air Operating Permits, OAQ-107 1200 Sixth Avenue Seattle, WA 98101	Air Quality Permit Compliance Department of Environmental Quality Pocatello Regional Office 444 Hospital Way, #300 Pocatello, ID 83201
Director Air and Waste Office EPA Region 10 Air Operating Permits, OAQ-107 1200 Sixth Avenue Seattle, WA 98101	Air Quality Permit Compliance Department of Environmental Quality Pocatello Regional Office 444 Hospital Way, #300 Pocatello, ID 83201			
60.7(b),(c)(d) and (f)	Notification and Record Keeping	<ul style="list-style-type: none"> • Notification of commencement of construction postmarked no later than 30 days of such date. • Notification of startup postmarked within 15 days of such date. • Notification of physical or operational change that may increase emissions postmarked 60 days before the change is made. • Maintain records of the occurrence and duration of any: startup, shutdown or malfunction of the affected source; malfunction of air pollution control device; and any period when a continuous monitoring system or monitoring device is inoperative. • For affected units with continuous monitoring device requirements report excess emissions and monitoring system performance semiannually, postmarked by January 30th and July 30th (in the format required by NSPS). • Maintain in a permanent form records suitable for inspection of all measurements, system testing, performance measurements, calibration checks, and adjustments/maintenance performed. Records shall be maintained for a period of two years from the date the record is required to be generated by the applicable regulation. • CEMS record keeping requirements depending on whether data is automatically or manually recorded - 40 CFR 60.7(f). 		
60.8	Performance Tests	<ul style="list-style-type: none"> • The owner or operator shall provide notice at least 30 days prior to any performance test to afford an opportunity for an observer to be present during testing. • At such times as may be required by the Administrator under section 114 of the Act, the owner or operator shall conduct performance test(s) and furnish a written report of the results of the test(s) 		
60.11(a),(b),(c), (d) and (g)	Compliance with Standards and Maintenance Requirements	<ul style="list-style-type: none"> • Other than opacity standards, where performance tests are required compliance with standards is determined by methods and procedures established by 40 CFR 60.8. • Compliance with NSPS opacity standards shall be determined by Method 9 of Appendix A. The owner or operator may elect to use COM measurements in lieu of Method 9 provided notification is made at least 30 days before the performance test. • At all times, including periods of startup, shutdown, and malfunction to the extent practicable, the operator shall maintain and operate any affected facility and air pollution control equipment consistent with good air pollution control practices. • For the purposes of determining compliance with standards any 		

Section	Section Title	Summary of Section Requirements
		creditable evidence may be used if the appropriate performance or compliance test procedure has been performed.
60.12	Circumvention	No owner or operator shall build, erect, install or use any article or method, including dilution, to conceal an emission which would otherwise constitute a violation.
60.13	Monitoring Requirements	All COMS and CEMS shall conform to the reporting, calibration and data reduction requirements specified in detail by this section. Reporting requirements include submitting performance evaluations reports within 60 days of the evaluations required by this section, and submitting results of the performance evaluations for the COMS within 10 days before a performance test if using COMS to determine compliance with opacity during a performance test instead of Method 9.
60.14	Modification	<ul style="list-style-type: none"> • Physical or operational changes to source types that are regulated by a NSPS which result in an increase in hourly emissions to which a standard applies is considered a modification (unless expressly exempted the NSPS). Modified sources become subject to the NSPS standards • Note that in accordance with IDAPA 58.01.01.201 no owner or operator may commence a modification without first obtaining a permit to construct unless the modification is exempted from the need to obtain a permit in accordance with IDAPA 58.01.01.220-223.
60.15	Reconstruction	<ul style="list-style-type: none"> • An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate. • "Reconstruction" means the replacement of components of an existing facility to such an extent that: (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility; and (2) It is technologically and economically feasible to meet the applicable standards set forth in this part. • If facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost required to construct a comparable entirely new facility, the Administrator shall be notified of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced, and the Administrator must respond to the request within 30 days.
60.19	Notifications and Reports	<ul style="list-style-type: none"> • time periods specified in days shall be measured in calendar days • specifies postmark deadline requirements • specifies requirements for the submission of periodic reports and combining schedules for multiple reports.

14. APPENDIX D – 40 CFR 61 SUBPART A REQUIREMENTS

The requirements of the general provisions in 40 CFR 61 Subpart A that are applicable to the owner or operator subject to the requirements of 40 CFR 61 Subpart R are summarized in the table below. Generally applicable reporting, record keeping and notification requirements of Subpart A of the National Emission Standards for Hazardous Air Pollutants (NESHAP, 40 CFR 61) are included in Table 14.2. These summaries are provided to highlight the notification and record keeping requirements of 40 CFR 61 for affected facilities, and are not intended to be a comprehensive listing of all general provision requirements that may apply nor do the summaries relieve the permittee from the responsibility to comply with all applicable requirements of the CFR. Should there be a conflict between these summaries and the NESHAP, the NESHAP shall govern. The permittee is encouraged to read all of 40 CFR 61 Subpart A. The CFRs are available on-line at: <http://www.gpoaccess.gov/cfr/index.html>.

Table 14.2 NESHAP Subpart A (40 CFR 61) Summary of General Provisions for Affected Facilities

Section	Section Title	Summary of Section
61.04	Address	All requests, reports, applications, and other communications shall be submitted to: Director Air and Waste Office Air Quality Permit Compliance EPA Region 10 Department of Environmental Quality Air Operating Permits, OAQ-107 Pocatello Regional Office 1200 Sixth Avenue 444 Hospital Way, #300 Seattle, WA 98101 Pocatello, ID 83201
61.05	Prohibited Activities	No owner or operator shall construct or modify any stationary source subject to a standard without first obtaining written approval in accordance with 40 CFR 61.08
61.07	Application for approval of construction/modification	Submit application for approval of construction of any new source or modification of an existing source before the construction or modification is planned to commence.
61.09	Notification of startup	Notification of anticipated date of initial startup of the source not more than 60 days nor less than 30 days before that date; and notification of the actual date of initial startup of the source within 15 days after that date.
61.10	Source reporting	All facilities designated under Subpart R are exempt from the reporting requirements of 40 CFR 61.10 in accordance with 40 CFR 61.210.
61.12(c) and (e)	Compliance with standards and maintenance requirements	The owner or operator of each stationary source shall maintain and operate the source, including associated equipment for air pollution control, in a manner consistent with good air pollution control practice for minimizing emissions. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed.
61.13	Emission tests	When emission testing is required under Subpart R, the requirements under 40 CFR 61.13 shall be complied with also.
61.14	Monitoring Requirements	For any monitoring required under Subpart R, the requirements under 40 CFR 61.14 shall be complied with also
61.19	Circumvention	No owner or operator shall build, erect, install or use any article or method, including dilution, to conceal an emission which would otherwise constitute a violation.