

STATE OF IDAHO

DEPARTMENT OF HEALTH AND WELFARE

DIVISION OF ENVIRONMENT

Pursuant to the Provisions
of Section 39-115 of the Idaho Code,
and the Rules and Regulations for the Con-
trol of Air Pollution in Idaho,

Beker Industries
Permittee, including affiliates, if any

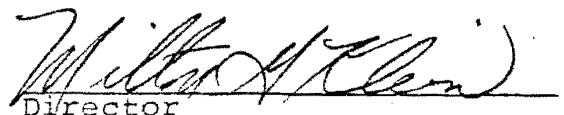
Post Office Box 37
Located at

Conda, Idaho 83230

is hereby granted permission to operate the Air
Pollution Source(s) and Control Equipment specified
herein provided the emission limitations, monitoring
requirements and other conditions set forth in the
Source Permit(s) are complied with.

Validation:

Issued 7/18/79Expiration 7/17/84


Director

PART I

SOURCE PERMIT NO. 13-0420-0003-01

Page 2 of 19

Beker Industries located at Conda, Idaho

is hereby granted permission to operate the following air pollution source or control equipment: Beneficiation with a vertical dryer with emissions controlled by a cyclone followed by a cyclonic spray scrubber.

Restrictions:

Emission Point	Emission Characteristic	Emission Limitations	Monitoring Requirements
Scrubber	Particulate	See Part III	Stack Test as Required By Operation and Maintenance Manu

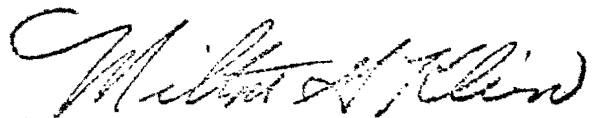
Conditions:

Total process weight is that amount, in pounds per hour, being fed to the dryer. Total actual emissions are calculated by adding the emissions from the above source(s).

Validation (if different from Facility Permit)

Issued _____

Expiration _____



PART I

SOURCE PERMIT NO. 13-0420-0003-02

Page 3 of 19

Beker Industries located at Conda, Idaho

is hereby granted permission to operate the following air pollution source or control equipment: North Calciner with emissions controlled by 3 cyclones followed by a venturi scrubber.

Restrictions:

Emission Point	Emission Characteristic	Emission Limitations	Monitoring Requirements
Scrubber	Particulate	See Part III	Stack Test as Required by Operation and Maintenance Manu

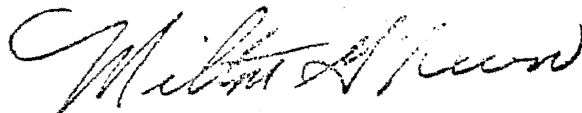
Conditions:

Total process weight is that amount, in pounds per hour, being fed to the calciner. Total actual emissions are calculated by adding the emissions from the above source(s).

Validation (if different from Facility Permit)

Issued _____

Expiration _____



PART I

SOURCE PERMIT NO. 13-0420-0003-03

Page 4 of 19

Beker Industries located at Conda, Idaho

is hereby granted permission to operate the following air pollution source or control equipment: #3 calciner with emission controlled by 3 cyclones followed by a venturi scrubber.

Restrictions:

Emission Point	Emission Characteristic	Emission Limitations	Monitoring Requirements
Scrubber	Particulate	See Part III	Stack Test as Required by Operation and Maintenance Manu

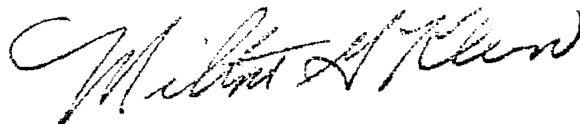
Conditions:

Total process weight is that amount, in pounds per hour, being fed to calciner. Total actual emissions are calculated by adding the emissions from the above source(s).

Validation (if different from Facility Permit)

Issued _____

Expiration _____



PART I

SOURCE PERMIT NO. 13-0420-0003-04

Page 5 of 19

Beker Industries located at Conda, Idaho

is hereby granted permission to operate the following air pollution source or control equipment: South Calciner with emissions controlled by 3 cyclones followed by a venturi scrubber.

Restrictions:

Emission Point	Emission Characteristic	Emission Limitations	Monitoring Requirements
Scrubber	Particulates	See Part III	Stack Test as Required by Operation and Maintenance Manu

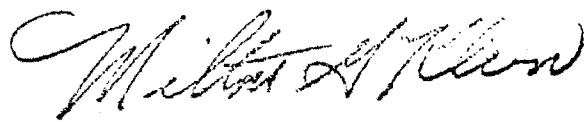
Conditions:

Total process weight is that amount, in pounds per hour, being fed to the calciner. Total actual emissions are calculated by adding the emissions from the above source(s).

Validation (if different from Facility Permit)

Issued _____

Expiration _____



PART I

SOURCE PERMIT NO. 13-0420-0003-05

Page 6 of 19

Beker Industries located at Conda, Idaho

is hereby granted permission to operate the following air pollution source or control equipment: North storage bin emissions controlled by a baghouse.

Restrictions:

Emission Point	Emission Characteristic	Emission Limitations	Monitoring Requirements
Baghouse	Particulate	0.10 pounds per ton of material fed to the storage bin.	Stack Test as Required by Operation and Maintenance Manu

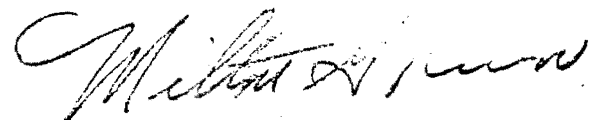
Conditions:

When visible emissions from the baghouse exceed 5% opacity, corrective action is to be implemented.

Validation (if different from Facility Permit)

Issued _____

Expiration _____



PART I

SOURCE PERMIT NO. 13-0420-0003-06

Page 7 of 19

Beker Industries located at Conda, Idaho

is hereby granted permission to operate the following air pollution source or control equipment: North ball mill with emissions controlled by a baghouse.

Restrictions:

Emission Point	Emission Characteristic	Emission Limitations	Monitoring Requirements
Baghouse	Particulate	0.10 Pounds per ton of material fed to the ball mill.	Stack Test as Required by Operation and Maintenance Manual

Conditions:

When visible emissions from the baghouse exceed 5% opacity, corrective action is to be implemented.

Validation (if different from Facility Permit)

Issued _____

Expiration _____

Milton A. Klein

PART I

SOURCE PERMIT NO. 13-0420-0003-07

Page 8 of 19

Beker Industries located at Conda, Idaho

is hereby granted permission to operate the following air pollution source or control equipment: South storage area emissions occurring during storage of ore materials are controlled by a baghouse.

Restrictions:

Emission Point	Emission Characteristic	Emission Limitations	Monitoring Requirements
Baghouse	Particulates	0.10 PPT ¹	Stack Test as Required by Operation and Maintenance Manu

Conditions:

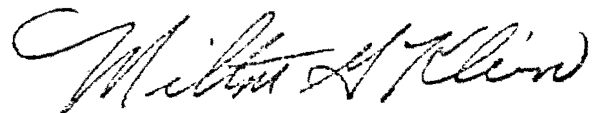
When visible emissions from the baghouse exceed 5% opacity, corrective action is to be implemented.

PPT¹ - Pounds per ton of material processed.

Validation (if different from Facility Permit)

Issued _____

Expiration _____



PART I

SOURCE PERMIT NO. 13-0420-0003-08

Page 9 of 19

Beker Industries located at Conda, Idaho

is hereby granted permission to operate the following air pollution source or control equipment: Grinding operation (south ball mill) input feed from emission point 07; emissions controlled by two baghouses.

Restrictions:

Emission Point	Emission Characteristic	Emission Limitations	Monitoring Requirements
#1 Baghouse	Particulate	0.10 PPT ¹	Stack Test as Required by Operation and Maintenance Mar
#2 Baghouse	Particulate	0.10 PPT ¹	

Conditions:

When visible emissions from the baghouse exceed 5% opacity, corrective action is to be implemented.

PPT¹ - Pounds per ton of material processed.

Validation (if different from Facility Permit)

Issued _____

Expiration _____



PART I

SOURCE PERMIT NO. 13-0420-0003-09

Page 10 of 19

Beker Industries located at Conda, Idaho
is hereby granted permission to operate the following air pollution
source or control equipment: Production of phosphoric acid in-
cluding digester and filtration systems, with emissions controlled
by a cyclonic spray scrubber.

Restrictions:

Emission Point	Emission Characteristic	Emission Limitations	Monitoring Requirements
Scrubber	Particulate	See Part III	Stack Test as Required by Operation and Maintenance Man

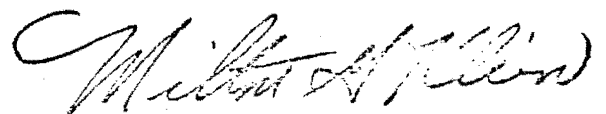
Conditions:

Total process weight is that amount, in pounds per hour, being fed to the digester. Total actual emissions are calculated by adding the emissions from the above source(s).

Validation (if different from Facility Permit)

Issued _____

Expiration _____



PART I

SOURCE PERMIT NO. 13-0420-0003-10

Page 11 of 19

Beker Industries located at Conda, Idaho

is hereby granted permission to operate the following air pollution source or control equipment: Diammonium phosphate production: Reactor, granulator and cooler are controlled by an ammonia scrubber followed by a cyclonic scrubber. All scrubbers exhaust through a common stack.

Restrictions:

Emission Point	Emission Characteristic	Emission Limitations	Monitoring Requirements
Common Stack	Particulate	See Part III	Stack Test as Required by Operation and Maintenance Man

Conditions:

Total process weight is that amount, in pounds per hour, being fed to the reactor. Total actual emissions are calculated by adding the emissions from the above source(s).

Validation (if different from Facility Permit)

Issued _____

Expiration _____

Milton A. Klein

PART I

SOURCE PERMIT NO. 13-0420-0003-11

Page 12 of 19

Beker Industries located at Conda, Idaho

is hereby granted permission to operate the following air pollution source or control equipment: West Sulfuric Acid Plant.

Restrictions:

Emission Point	Emission Characteristic	Emission Limitations	Monitoring Requirements
Stack	SO ₂	27.0 PPT ¹ or 1125 pounds of SO ₂ per hour.	Continuous - Stack Test as Required by Operation and Maintenance Man
	H ₂ SO ₄ Mist	0.50 Pounds per ton of 100% sulfuric acid produced.	Stack Test as Required by Operation and Maintenance Man

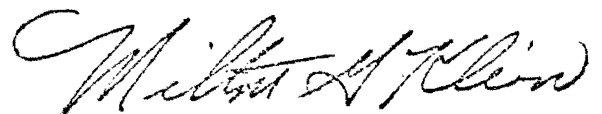
Conditions:

PPT¹ - Pounds per ton of 100% equivalent acid produced.

Validation (if different from Facility Permit)

Issued _____

Expiration _____



PART I

SOURCE PERMIT NO. 13-0420-0003-12

Page 13 of 19

Beker Industries located at Conda, Idaho
is hereby granted permission to operate the following air pollution
source or control equipment: East sulfuric acid plant.

Restrictions:

Emission Point	Emission Characteristic	Emission Limitations	Monitoring Requirements
Stack	SO ₂	4.0 PPT ¹ or not to exceed 504 pounds of SO ₂ per 3 hour period.	Continuous - Stack Test as Required by Operation and Maintenance Manual
	H ₂ SO ₄ Mist	0.15 Pounds per ton of 100% sulfuric acid produced.	Stack Test as Required by Operation and Maintenance Manual

Conditions:

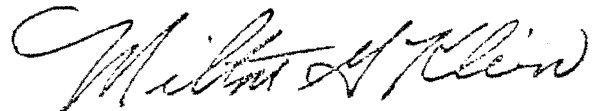
- 1) This source is required to meet new source performance standards.
- 2) Visible emissions are not to exceed 10% opacity.

PPT¹ - Pounds per ton of equivalent 100% acid produced.

Validation (if different from Facility Permit)

Issued _____

Expiration _____



PART I

SOURCE PERMIT NO. 13-0420-0003-13

Page 14 of 19

Beker Industries located at Conda, Idaho

is hereby granted permission to operate the following air pollution source or control equipment: Ammonia Plant

Restrictions:

Emission Point	Emission Characteristic	Emission Limitations	Monitoring Requirements
----------------	-------------------------	----------------------	-------------------------

General Provisions of the Rules and Regulations for the Control of Air Pollution in Idaho

Conditions:

Validation (if different from Facility Permit)

Issued _____

Expiration _____



PART I

SOURCE PERMIT NO. 13-0420-0003-14

Page 15 of 19

Beker Industries located at Conda, Idaho

is hereby granted permission to operate the following air pollution source or control equipment: Beneficiation building with baghouse.

Restrictions:

Emission Point	Emission Characteristic	Emission Limitations	Monitoring Requirements
Baghouse	Particulate	0.10 Pounds per ton of material processed.	Stack Test as Required by Operation and Maintenance Mar

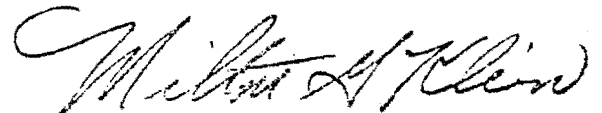
Conditions:

When visible emissions from the baghouse exceed 5% opacity, corrective action is to be implemented.

Validation (if different from Facility Permit)

Issued _____

Expiration _____



Supervising Signature

PART II GENERAL PROVISIONS

- A All emissions authorized herein shall be consistent with the terms and conditions of this permit. The emission of any pollutant in excess of the limitations specified herein, or non-compliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules and Regulations for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code 39-101 et seq.
- B The permittee shall at all times (except as provided in the Rules and Regulations for the Control of Air Pollution in Idaho) 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 laws for the control of air pollution.
- C The permittee shall allow the Director, and/or his authorized representative(s), upon the presentation of credentials:
- 1) To enter upon the permittee's premises where an emission source is located, or in which any records are required to be kept under the terms and conditions of this permit; and

2) at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit, and to sample any emission of pollutants.

- D Except for data determined to be confidential under Section 39-111, Idaho Code, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate regional office of the Division of Environment.
- E Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state or local law or regulation, except as specifically provided herein.
- F In the event of any change in control or ownership of source(s) from which the authorized emissions emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Director.
- G Until the expiration date, this permit shall be renewable annually, provided the permittee submits any and all information necessary for the Director to determine the amount and type of air pollutants emitted from the equipment for which this permit is granted. Failure to submit

such information within sixty (60) days after receipt of the Director's request shall cause the permit to be voided.

- H The Director may require the permittee to develop a list of Operation and Maintenance Procedures which must be approved by the Department. Such list of procedures shall become a part of this permit by reference, and the permittee shall adhere to all of the operation and maintenance procedures contained therein.
- I The permittee shall provide the appropriate regional office a minimum of five (5) days notice prior to the scheduled date of any emissions test required pursuant to this permit. The permittee shall notify the appropriate regional office of any change in the testing schedule and shall provide at least one (1) days notice prior to conducting any rescheduled test. Any records or data generated as a result of such compliance tests shall be made available to the Department upon request.

PART III EMISSION LIMITATIONS

1. Allowable Mass Emission Rate (Effective on Issuance of Permit Unless Otherwise Noted)

A person shall not discharge into the atmosphere from any source operating prior to February 1, 1979 particulate matter in excess of the amount shown by the following equations:

If PW is less than 17,000 pounds per hour,

$$E = .045 (PW)^{0.60}$$

If PW is equal to or greater than 17,000 pounds per hour,

$$E = 1.12 (PW)^{0.27}$$

Where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour.