

Air Quality

PERMIT TO CONSTRUCT

Permittee Itafos Conda LLC
Permit Number P-2021.0036
Project ID 62668
Facility ID 029-00003
Facility Location 3010 Conda Road
Soda Springs, ID 83241

Permit Authority

This permit (a) is issued according to the “Rules for the Control of Air Pollution in Idaho” (Rules), IDAPA 58.01.01.200–228; (b) pertains only to emissions of air contaminants regulated by the State of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with the application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; and (g) in no manner implies or suggests that the Idaho Department of Environmental Quality (DEQ) or its officers, agents, or employees assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment, or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200–228.

Date Issued January 12, 2022

Christina Boulay

Christina Boulay, Permit Writer

Mike Simon

Mike Simon, Stationary Source Bureau Chief

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1 Permit Scope

Purpose

- 1.1 This is an initial permit to construct (PTC) for a modification at an existing permitted facility to recover fluosilicic acid (FSA) and load FSA for shipment into railcars or tanker trucks. Emission of FSA vapors (as fluoride) will occur from the conditioning vent scrubber stack and from railcar and/or tanker truck filling.

Regulated Sources

Table 1.1 lists all sources of regulated emissions in this permit.

Table 1.1 Regulated Sources

Permit Section	Source	Control Equipment
2	FSA recovery process	<u>Conditioning Vent Wet Scrubber (existing):</u> Manufacturer: Indusco Liquid to gas ratio: 0.073, or greater
	FSA Loading into Railcars and Trucks	<u>None</u>

2 FSA Recovery Process

2.1 Process Description

FSA (fluosilicic acid, hydrofluosilicic acid, or H₂SiF₆) is a common by-product of phosphate fertilizer production, which typically resides in phosphogypsum pond systems, is responsible for fluoride emissions from the plant, and contributes to the low pH characteristics of pond water. FSA will be recovered as a 25% solids-free solution and sold, primarily to the municipal water fluoridation market in the U.S. The FSA recovery process will be placed within the existing “PPA” evaporator process – between the entrainment separator and the barometric condenser. Existing tank vapors are collected and sent to the conditioning vent (previously known as the Secondary Phosphoric Acid Plant stack, or PPA). To recover FSA, Itafos will install a new separation vessel, recirculation tank, and pump. While the installed equipment is a mostly closed system, the FSA recovery process will result in emissions of fluorides from the existing conditioning vent scrubber stack, from vapors collected from the FSA recirculation tank, 52% Hotwell, and the FSA storage tanks. FSA vapor emissions, expressed as fluoride emissions, will also occur during the transfer of FSA into railcars and/or tanker trucks for shipping.

2.2 Control Device Descriptions

Table 2.1 FSA Recovery Process Description

Emissions Units / Processes	Control Devices
FSA recovery process	<u>Conditioning Vent Wet Scrubber (existing):</u> Manufacturer: Indusco Liquid to gas ratio: 0.073, or greater
FSA Loading into Railcars and Trucks	None

Emission Limits

2.3 Emission Limits

The fluoride emissions from the railcar, truck loading, and conditioning vent wet scrubber shall not exceed 1.30 pounds per hour or 2.70 T/yr.

2.4 Opacity Limit

Emissions from the railcar, truck loading, and conditioning vent wet scrubber, or any other stack, vent, or functionally equivalent opening associated with the railcar, truck loading, and conditioning vent wet scrubber, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

Operating Requirements

2.5 FSA Recovery Process Loading Limits

The FSA loaded into railcars and trucks shall not exceed 70,000 gallons per day.

Monitoring and Recordkeeping Requirements

2.6 FSA Recovery Process Loading Limits

Each calendar day, the permittee shall monitor and record the gallons of FSA loaded into railcars and trucks to demonstrate compliance with the FSA Recovery Process Loading Limits permit condition.

3 General Provisions

General Compliance

- 3.1 The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the “Rules for the Control of Air Pollution in Idaho.” The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit, the “Rules for the Control of Air Pollution in Idaho,” and the Environmental Protection and Health Act (Idaho Code §39-101, et seq).
- [Idaho Code §39-101, et seq.]**
- 3.2 The permittee shall at all times (except as provided in the “Rules 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 Idaho laws for the control of air pollution.
- [IDAPA 58.01.01.211, 5/1/1994]**
- 3.3 Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules, and regulations.
- [IDAPA 58.01.01.212.01, 5/1/1994]**

Inspection and Entry

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

Construction and Operation Notification

- 3.5 This permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year.
- [IDAPA 58.01.01.211.02, 5/1/1994]**
- 3.6 The permittee shall furnish DEQ written notifications as follows:
- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;
 - A notification of the date of any suspension of construction, if such suspension lasts for one year or more; and

- A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211.01, 5/1/1994]

- A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and
- A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date.

[IDAPA 58.01.01.211.03, 5/1/1994]

Performance Testing

3.7 If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. 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.

3.8 All performance 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, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

3.9 Within 60 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/2000 and 4/11/2015]

Monitoring and Recordkeeping

3.10 The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Monitoring records 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.

[IDAPA 58.01.01.211, 5/1/1994]

Excess Emissions

- 3.11 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130–136 for excess emissions due to start-up, shut-down, scheduled maintenance, safety measures, upsets, and breakdowns.

[IDAPA 58.01.01.130–136, 4/5/2000]

Certification

- 3.12 All documents submitted to DEQ—including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification—shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/1994]

False Statements

- 3.13 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, 3/23/1998]

Tampering

- 3.14 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, 3/23/1998]

Transferability

- 3.15 This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/2006]

Severability

- 3.16 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 58.01.01.211, 5/1/1994]