STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502
www.deq.idaho.gov

Governor Brad Little
Director John H. Tippets

August 23, 2019

Gregg Peterson, PE Manager
Crookham Company
301 W. Warehouse St.
Caldwell, Idaho 83605

RE: Facility ID No. 027-00020, Crookham Company, Caldwell
Final Permit Letter

Dear Mr. Peterson:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2017.0008 Project 62249 to Crookham Company located at Caldwell to increase daily and annual throughput of raw material, remove annual operating hours for all processes, add daily phosphine limit, and add seventeen natural gas-fired dryers. This PTC is issued in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho) and is based on the certified information provided in your PTC application received June 10, 2019.

This permit is effective immediately and replaces PTC No. P-2017.0008, issued on May 11, 2017. This permit does not release Crookham Company from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

Pursuant to the Construction and Operation Notification General Provision of your permit, it is required that construction and operation notification be provided. Please provide this information as listed to DEQ's Boise Regional Office, 1445 N. Orchard St., Boise Idaho 83706 , Fax (208) 373-0287.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with Dave Luft, Air Quality Manager, at (208) 373-0201 to review and discuss the terms and conditions of this permit. Should you choose to schedule this meeting, DEQ recommends that the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any other staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to contact Christina Boulay at (208) 373-0502 or christina.boulay@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,

Mike Simon
Stationary Source Program Manager
Air Quality Division

MS\cb

Permit No. P-2017.0008 PROJ 62249
Enclosures

Air Quality

PERMIT TO CONSTRUCT

Permittee	Crookham Company
Permit Number	P-2017.0008
Project ID	62249
Facility ID	027-00020
Facility Location	301 W. Warehouse St. Caldwell, Idaho 83605

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 August 23, 2019

Christina Boulay

Christina Boulay, Permit Writer

Mike Simon, Stationary Source Manager

Contents

1 Permit Scope

Purpose

1.1 This is a modified permit to construct (PTC) to increase the daily and annual throughput of raw material, remove the annual operating hours for all processes, add a daily phosphine limit, and add seventeen natural gas-fired dryers.

1.2 Those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and on the right-hand margin.

1.3 This PTC replaces Permit to Construct No. P-2017.0008, issued on May 11, 2017.

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	Seed Processing Operations	Husking Shed 7: Baghouse Husking Shed 11: Baghouse Sheller: Baghouse Scalper Building 4: Baghouse Building 26 Electronic Sorting: Baghouse Building 26 Treating and Bagging: Baghouse Seed Vault: Baghouse Mill Building 3 : Eight Cyclones
2	Two Fumigation Chambers	None
3	Natural Gas Dryer No. of Units: 7 Manufacturer: Eclipse Airheat Model: 7244 Manufacture Date: 6/1/2018 Heat input rating: 3.75 MMBtu/hr Fuel: Natural gas	None
3	Natural Gas Dryer No. of Units: 2 Manufacturer: Eclipse Airheat Model: 7244 Manufacture Date: 6/1/2018 Heat input rating: 4.5 MMBtu/hr Fuel: Natural gas	
3	Natural Gas Dryer No. of Units: 6 Manufacturer: Eclipse Airheat Model: 7244 Manufacture Date: 6/1/2018 Heat input rating: 5 MMBtu/hr Fuel: Natural gas	
3	Natural Gas Dryer No. of Units: 2 Manufacturer: Eclipse Airheat Model: 7244 Manufacture Date: 6/1/2018 Heat input rating: 9 MMBtu/hr Fuel: Natural gas	
4	Fugitive Dust	Fugitive Dust Control Plan

[8/23/2019]

2 Seed Processing Operations

2.1 Process Description

Crookham Company processes various types of seeds from both local and foreign suppliers. The seeds are dried, treated, and bagged. Six phosphine fumigation cells are used in each of the two chambers to eliminate any pests from the seeds.

[8/23/2019]

Emission Limits

2.2 Emission Limits

The emissions from the seed processing operations shall not exceed any corresponding emissions rate limits listed in Table 2.1 and 2.2.

Table 2.1 See Processing Operations Emission Limits [a]

Source Description	$PM_{2.5}$ [b]		PM_{10} [b]	
	lb/hr [c]	T/yr [d]	lb/hr [c]	T/yr [d]
Receiving	5.00E-02	2.50E-02	2.95E-01	1.48E-01
Husking	3.08E-03	2.22E-03	1.81E-02	1.31E-02
Sheller (Large)	4.17E-03	1.12E-03	2.46E-02	6.62E-03
Sheller (Small)	2.90E-03	1.25E-04	1.12E-02	1.90E-03
Scalper	3.56E-04	1.17E-03	2.09E-03	6.92E-03
Mill 1	0.03	4.01E-03	0.16	2.36E-02
Mill 2	0.03	4.01E-03	0.16	2.36E-02
Mill 3	0.02	4.01E-03	0.11	2.36E-02
Mill 4	7.18E-03	1.14E-03	4.23E-02	6.73E-03
Mill 5	7.18E-03	1.14E-03	4.23E-02	6.73E-03
Sizer 1 East	0.01	1.47E-02	0.05	8.65E-02
Sizer 2 North	0.02	3.72E-02	0.14	2.19E-01
Sorting (E1)	1.31E-04	3.38E-04	7.65E-04	1.98E-03
Bagging	8.70E-04	3.38E-04	5.10E-03	1.98E-03

a) In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
b) Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
c) Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
d) Tons per any consecutive 12-calendar month period.

Table 2.2 Phosphine Operations Emission Limits[a]

Source Description	lb/hr [b]
Phosphine	0.034

a) In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
b) Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.

[8/23/2019]

2.3 Opacity Limit

Emissions from any stack, or any other stack, vent, or functionally equivalent opening associated with the seed processing operations, 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.

[5/11/ 2017]

Operating Requirements

2.4 Raw Material Throughput

The maximum throughput of the receiving area shall not exceed 600 tons per day of raw material. The permittee shall not process more than 25,000 tons of seed material per any consecutive 12-month period (T/yr).

[8/23/2019]

2.5 Daily Phosphine Material Throughput

The maximum throughput of phosphine in each chamber shall not exceed 1.5 pounds per day.

[8/23/2019]

2.6 Annual Final Product Throughput

The maximum annual final product throughput shall not exceed 7,765 tons per year per any consecutive 12-month period (T/yr).

[8/23/2019]

2.7 Process Requirements

The sheller, husker, scalper, treating and bagging, and electronic sorter emissions shall be controlled by baghouses.

[5/11/ 2017]

Monitoring and Recordkeeping Requirements

2.8 Raw Material Monitor Operating Parameters

The permittee shall monitor and record the amount of seed material received each day that the receiving area is operating. Each month, the permittee shall calculate the total amount of material received for the previous consecutive 12-month period. The most recent two-year compilation of records shall be kept onsite and made available to DEQ representatives upon request.

[8/23/2019]

2.9 Daily Phosphine Throughput Monitor Operating Parameters

The permittee shall monitor and record the amount in pounds of phosphine used in each chamber each day that phosphine is used. The most recent two-year compilation of records shall be kept onsite and made available to DEQ representatives upon request.

[8/23/2019]

2.10 Annual Final Product Throughput Monitor Operating Parameters

The permittee shall monitor and record the amount of final product produced each day. Each month, the permittee shall calculate the total amount of final product produced for the previous consecutive 12-month period. The most recent two-year compilation of records shall be kept onsite and made available to DEQ representatives upon request.

[8/23/2019]

3 Dryers

3.1 Process Description

Crookham Company utilizes seventeen natural gas-fired dryers throughout their harvesting period. Each unit ranges from 3.75 MMBtu/hr to 9.00 MMBtu/hr.

[8/23/2019]

3.2 Control Device Descriptions

Table 3.1 Space Heaters Description

Emissions Units / Processes	Control Devices
Natural Gas Dryer No. of Units: 7 Manufacturer: Eclipse Airheat Model: 7244 Manufacture Date: 6/1/2018 Heat input rating: 3.75 MMBtu/hr Fuel: Natural gas	None
Natural Gas Dryer No. of Units: 2 Manufacturer: Eclipse Airheat Model: 7244 Manufacture Date: 6/1/2018 Heat input rating: 4.5 MMBtu/hr Fuel: Natural gas	
Natural Gas Dryer No. of Units: 6 Manufacturer: Eclipse Airheat Model: 7244 Manufacture Date: 6/1/2018 Heat input rating: 5 MMBtu/hr Fuel: Natural gas	
Natural Gas Dryer No. of Units: 2 Manufacturer: Eclipse Airheat Model: 7244 Manufacture Date: 6/1/2018 Heat input rating: 9 MMBtu/hr Fuel: Natural gas	

[8/23/2019]

Emission Limits

3.3 Emission Limits

The emissions from the dryer operations shall not exceed any corresponding emissions rate limits listed in Table 3.2.

Table 3.2 Space Heater Emission Limits [a]

Source Description	$PM_{2.5}$ [b]/PM_{10} [b]		SO_2		NO_X		CO		VOC	
	lb/hr [c]	T/yr [d]	lb/hr [c]	T/yr [d]	lb/hr [c]	T/yr [d]	lb/hr [c]	T/yr [d]	lb/hr [c]	T/yr [d]
Dryers	6.20E-01	0.19	4.90E-02	1.47E-02	8.16	2.45	6.86	2.06	0.45	0.14

a) In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
b) Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
c) Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
d) Tons per any consecutive 12-calendar month period.

[8/23/2019]

3.4 Grain Loading Standard

The permittee shall not discharge to the atmosphere from any fuel-burning equipment PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gaseous fuel in accordance with IDAPA 58.01.01.677.

[8/23/2019]

Operating Requirements

3.5 Fuel Type

The permittee shall burn natural gas in the dryers exclusively.

[8/23/2019]

3.6 Annual Fuel Usage Limit

The total annual natural gas usage of all the space heaters shall not exceed 49.02 million standard cubic feet (MMscf/yr) per any consecutive 12-month period.

[8/23/2019]

Monitoring and Recordkeeping Requirements

3.7 Annual Fuel Usage

Each calendar month, the permittee shall monitor and record the natural gas usage for the previous month in MMscf per month. Natural gas usage shall be determined by summing the monthly natural gas usage over the previous consecutive 12-month period to demonstrate compliance with the Annual Fuel Usage Permit Conditions.

[8/23/2019]

4 Fugitive Dust Control

4.1 Operating Requirements

All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651. In determining what is reasonable considerations will be given to factors such as the proximity of dust-emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of particulate matter. Some of the reasonable precautions include, but are not limited to, the following:

- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land.
- Application, where practical, of asphalt, oil, water, or suitable chemicals to, or covering of dirt roads, material stockpiles, and other surfaces which can create dust.
- Installation and use, when practical, hoods, fans, and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.
- Covering, where practical, of open-bodied trucks transporting materials likely to give rise to airborne dusts.
- Paving of roadways and their maintenance in a clean condition, where practical.
- Prompt removal of earth or other stored material from streets, where practical.

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 emissions.

The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. 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.

[5/11/ 2017]

4.2 Fugitive Dust Management

In addition to the general fugitive dust requirements above, the following fugitive dust control techniques shall be utilized to control fugitive dust from the receiving area and unpaved parking lots on the facility:

- Wind breaks shall be used around the receiving area whenever material is received.
- Construct cloth barriers, or equivalent, around the receiving hopper. The permittee shall assess the effectiveness of the barrier and add more coverage if it is necessary to control fugitive dust emissions.
- Install water application apparatus (spray nozzles) on the hopper and shaker. These sprays shall be activated when necessary for reasonable control of fugitive dust.
- Apply dust suppressant to the facility's unpaved parking lots as necessary to control fugitive dust.
- Conduct daily see/no-see visible emissions evaluation and monitoring of the receiving area once per day during receiving operations by personnel. If fugitive emissions are observed at the receiving area the permittee shall take immediate corrective action.

- A log shall be maintained for the receiving area, and the following information, at a minimum, shall be entered into the log whenever the receiving area is in operation: the date and hours of operation of the receiving area; the date, time, and results of each fugitive dust inspection; and, if required, a detailed description including the results of any fugitive dust control procedure(s) employed.

[5/11/ 2017]

4.3 Visible Emission Limits

Visible emissions shall not be observed leaving the property boundary for a period or periods aggregating more than three minutes in any 60-minute period. Visible emissions shall be determined by Environmental Protection Agency Reference Method 22, as described in 40 CFR 60, Appendix A-7, or a DEQ-approved alternative method.

[5/11/2017]

Monitoring and Recordkeeping Requirements

4.4 Fugitive Dust Control Monitoring

The permittee shall conduct a monthly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions to assess the effectiveness of the fugitive emissions controls. If fugitive 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 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 emissions, and the date the corrective action was taken.

[5/11/ 2017]

4.5 Visible Emissions Monitoring

The permittee shall conduct a monthly visible emissions inspection at the property boundary using the methods in 40 CFR 60, Appendix A-7 Method 22, or a DEQ-approved alternative. If visible emissions are detected, the permittee shall conduct a facility-wide inspection of visible emissions to determine the cause of the visible emissions and take corrective action as expeditiously as possible. The permittee shall maintain records of the results of each visible 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 visible emissions were present (if observed), any corrective action taken in response to the visible emissions, and the date the corrective action was taken.

[5/11/ 2017]

5 General Provisions

General Compliance

5.1 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.]

5.2 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, 5/1/94]

5.3 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, 5/1/94]

Inspection and Entry

5.4 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

5.5 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, 5/1/94]

5.6 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, 5/1/94]

- 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, 5/1/94]

Performance Testing

5.7 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.

5.8 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.

5.9 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, 4/5/00 and 4/11/15]

Monitoring and Recordkeeping

5.10 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, 5/1/94]

Excess Emissions

5.11 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, 4/5/00]

Certification

5.12 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, 5/1/94]

False Statements

5.13 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, 3/23/98]

Tampering

5.14 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, 3/23/98]

Transferability

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

[IDAPA 58.01.01.209.06, 4/11/06]

Severability

5.16 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, 5/1/94]