STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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www.deq.idaho.gov

C.L. "Butch" Otter, Governor
John H. Tippets, Director

November 30, 2016

Alan Haslam, Director of Mining
Nu-West Industries, Inc. dba Agrium - Rasmussen Valley Mine
3010 Conda Road
Soda Springs, ID 83276

RE: Facility ID No. 029-00044, Nu-West Industries, Inc. dba Agrium - Rasmussen Valley Mine, Soda Springs
Final Permit Letter

Dear Mr. Haslam:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2016.0033 Project 61734 to Nu-West Industries, Inc. dba Agrium - Rasmussen Valley Mine located near Soda Springs for the open pit phosphate mining operation. 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 3, 2016, and on all relevant comments received on DEQ's proposed permit during the public comment period.

This permit is effective immediately. This permit does not release Nu-West Industries, Inc. dba Agrium - Rasmussen Valley Mine 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 Pocatello Regional Office, 444 Hospital Way, #300, Pocatello, Fax (208) 236-6168.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with Rick Elkins, Air Quality Analyst, at (208) 236-6160 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.

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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 Craig Woodruff at (208) 373-0502 or craig.woodruff@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\cw

Permit No. P-2016.0033 PROJ 61734

Enclosures

Air Quality

PERMIT TO CONSTRUCT

Permittee	Nu-West Industries, Inc. dba Agrium - Rasmussen Valley Mine
Permit Number	P-2016.0033
Project ID	61734
Facility ID	029-00044
Facility Location	Approximately 18 miles Northeast of Soda Springs, ID

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 November 30, 2016

Craig Woodruff, Permit Writer

Mike Simon, Stationary Source Manager

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1 Permit Scope

Purpose

1.1 This is the initial permit to construct (PTC) an open-pit phosphate ore mining facility.

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	Drilling, blasting, screening, loading, unloading, and haul roads	Reasonable controls
3	CI Ready Line Engine Generator (or equivalent[a]): Date of construction: 2017 Manufacture Date: 2012 or newer Max. Brake Horsepower: 107 bhp Max. Operation: 8,760 hr/yr Fuel: Diesel Max. fuel consumption: 4.3 gal/hr Max. displacement: 1.13 L/cylinder	EPA Tier 4 technologies
3	CI Well Pump 1 Engine (or equivalent[a]): Date of construction: 2015 Manufacture Date: 2012 or newer Max. Brake Horsepower: 113 bhp Max. Operation: 8,760 hr/yr Fuel: Diesel Max. fuel consumption: 5.3 gal/hr Max. displacement: 1.13 L/cylinder	EPA Tier 3 technologies
3	CI Well Pump 2 Engine (or equivalent[a]): Date of construction: 2017 Manufacture Date: 2013 or newer Max. Brake Horsepower: 65.7 bhp Max. Operation: 8,760 hr/yr Fuel: Diesel Max. fuel consumption: 2.93 gal/hr Max. displacement: 0.54 L/cylinder	EPA Tier 4 Technologies
3	CI Light Plant Engines (9 units) (or equivalent[a]): Date of construction: 2017 Manufacture Date: 2013 or newer Max. Brake Horsepower: 24.7 bhp Max. Operation: 8,760 hr/yr Fuel: Diesel Max. fuel consumption: 1.48 gal/hr Max. displacement: 0.5 L/cylinder	EPA Tier 4 Technologies

a) Or equivalent is defined as an engine whose emission factors and horsepower are less than or equal to what was supplied in the application and whose flow rate, exhaust temperature, and stack height are greater than or equal to what was provided in the application. An engine that meets all of these criteria would be considered an equivalent engine.

2 Facility-Wide Conditions

2.1 Process Description

Operations at the Rasmussen Valley Mine facility include open-pit mining, which includes drilling, blasting, loading, and hauling of ore and overburden material; and stockpiling of ore, growth media, and overburden material. Other emissions sources operated at the mine include diesel-fired engines powering generators and light units.

Visible Emissions

2.2 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 the test methods and procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides (NOx), and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this section.

2.3 Each month that the facility is operated, the permittee shall conduct a facility wide inspection of potential sources of visible emissions, during daylight hours and under normal operating conditions to demonstrate compliance with the visible emissions limit. The visible emissions inspection shall consist of a see/no see evaluation for each potential source. If any visible emissions are present from any point of emission, the permittee shall either take appropriate corrective action as expeditiously as practicable, or 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% 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 accordance with IDAPA 58.01.01.130-136. The permittee shall maintain records of the results of each visible emissions 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.

Fugitive Dust

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

- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.
- Application, where practical, of asphalt, oil, water, or suitable chemicals to, or covering of, dirt roads, material stockpiles, and other surfaces which can create dust.
- Installation and use, where practical, of hoods, fans, 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.

2.5 Each day that the facility is operated, the permittee shall conduct a facility-wide inspection of potential sources of fugitive emissions (e.g., stockpiles, transfer points, etc.) during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective . If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable.

2.6 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), hours of operation (start & stop) of water, or chemical dust suppressant, application systems, hours of operation of each material handling equipment, certification of data recordkeeping in accordance with general provisions and any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.

Each time fugitive dust emissions trigger correction of a dust control strategy or implementation of additional dust control strategies, the permittee shall monitor and record the trigger, the corrective action used, and the results achieved from the use of that control strategy or strategies.

2.7 The permittee shall maintain a Fugitive Dust Control Plan to ensure compliance with fugitive dust requirements. The Fugitive Dust Control Plan shall identify potential sources of fugitive dust and shall specify reasonable precautions for control of fugitive dust sources. A copy of the Fugitive Dust Control Plan shall remain onsite at all times. Any changes to the Fugitive Dust Control Plan shall be documented.

2.8 The permittee shall comply with the requirements in the Fugitive Dust Control Plan at all times that the facility is operated. Requirements in the Fugitive Dust Control Plan shall be incorporated by reference to this permit and shall be enforceable permit conditions.

Requirements

2.9 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 60, Subpart IIII.
- National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP), 40 CFR 63, Subpart ZZZZ.

For permit conditions referencing or cited in accordance with any document incorporated by reference (including permit conditions identified as NSPS), 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.

3 Generator Engines

Emission Limits

3.1 NSPS 40 CFR 60, Subpart IIII – Emission Standards for the Generator Engines

The permittee shall comply with the emission standards for new compression ignition (CI) engines in 40 CFR 60.4201 for each of the generator engines and each of the light plant generator engines (listed in Table 1.1), in accordance with 40 CFR 60.4204(b) and IDAPA 58.01.01.210.21.

Table 3.1 Summary of Table 1 to 40 CFR 89.112 and Table 1 to 40 CFR 1039.101 - Emission Standards

Rated Power (KW)	Tier	CO	NMHC + NO_x	NO_x	NMHC	PM
75≤kW<130	3	5.0	4.0	--	--	0.30
8≤kW<19	4	6.6	7.5	--	--	0.40
37≤kW<56	4	5.0	4.7	--	--	0.03
56≤kW<130	4	5.0	--	0.40	019	0.02

Exhaust opacity/smoke emission standards in 40 CFR 89.113(a) and 40 CFR 1039.105:

- 20 percent during the acceleration mode;
- 15 percent during the lugging mode; and
- 50 percent during the peaks in either the acceleration or lugging modes.

Operating Requirements

3.2 NSPS 40 CFR 60, Subpart IIII – Compliance Requirements

- The permittee shall operate and maintain the generator engines and control devices according to the manufacturer's emission-related written instructions, in accordance with 40 CFR 60.4211(a)(1).
- The permittee shall change only those emission-related settings that are permitted by the manufacturer, in accordance with 40 CFR 60.4211(a)(2).
- The permittee shall meet the requirements of 40 CFR parts 89, 94, and/or 1068 as applicable, in accordance with 40 CFR 60.4211(a)(3).
- The permittee shall install and configure the generator engines according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g), in accordance with 40 CFR 60.4211(c).
- For engines with a maximum power of less than 100 horsepower , the permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practices for minimizing emissions. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or changes the emission-related settings in a way that is not permitted by the manufacturer, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action, in accordance with 40 CFR 60.4211(g)(1).

- For engines with a maximum power of less than 500 horsepower and greater than 100 horsepower, the permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instruction, or changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup or within 1 year of such action, in accordance with 40 CFR 60.4211(g)(2).

3.3 NSPS 40 CFR 60, Subpart IIII – Operating and Maintenance Requirements

The permittee shall operate and maintain the generator engines that achieve the emission standards as required in 40 CFR 60.4204 (Emission standards for the Generator Engines permit condition) over the entire life of the engine, in accordance with 40 CFR 60.4206.

3.4 NSPS 40 CFR 60, Subpart IIII – Monitoring and Recordkeeping Requirements

The permittee shall meet the requirements of 40 CFR 60.4209, 40 CFR 60.4211, and 40 CFR 60.4214.

- If an engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.
- If an engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

3.5 NSPS 40 CFR 60, Subpart IIII – Fuel Specifications

The permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b), in accordance with 40 CFR 60.4207(b).

- Diesel fuel is subject to the following per-gallon standards:
  - 15 parts per million by weight (ppmw) maximum sulfur content.
  - Minimum cetane index of 40, or maximum aromatic content of 35 volume percent.

40 CFR 60, Subpart A – General Provisions

3.6 NSPS 40 CFR 60, Subpart IIII – Applicable General Provisions

Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII

General Provisions citation	Subject of citation	Applies To Subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4219.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4214(a).
§60.8	Performance tests	Yes	Except that §60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	Yes	Except that §60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	

4 General Provisions

General Compliance

4.1 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.]

4.2 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]

4.3 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

4.4 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

4.5 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]

4.6 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;
- 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; and
- A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211.03, 5/1/94]

Performance Testing

4.7 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.

4.8 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.

4.9 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 written 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

4.10 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

4.11 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

4.12 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

4.13 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

4.14 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

4.15 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

4.16 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]