



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

Brad Little, Governor
Jess Byrne, Director

November 18, 2020

Jeff Register, Vice President
Carco Mineral Resources Inc
1370 Pantheon Way Suite 175
San Antonio, Texas 78232

RE: Facility ID No. 027-00034, Carco Mineral Resources Inc, Caldwell
Final Permit Letter

Dear Jeff Register:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2020.0020 Project 62457 to Carco Mineral Resources Inc located at Caldwell for an existing clay silo and baghouse control equipment. 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, 2020.

This permit is effective immediately and replaces PTC No. P-027-00034 issued on February 21, 1996. This permit does not release Carco Mineral Resources Inc 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, ID 83706, Fax (208) 373-0284.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a permit handoff meeting with David 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 Chris Duerschner at (208) 373-0502 or Chris.Duerschner@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,

A handwritten signature in black ink that reads "Mike Simon".

Mike Simon
Stationary Source Bureau Chief
Air Quality Division

MS\cd
Permit No. P-2020.0020 PROJ 62457
Enclosures (2)

Air Quality

PERMIT TO CONSTRUCT

Permittee Carco Mineral Resources Inc
Permit Number P-2020.0020
Project ID 62457
Facility ID 027-00034
Facility Location 520 Bloomquist Ave
Caldwell, ID 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 November 18, 2020



Chris Duerschner, Permit Writer



Mike Simon, Stationary Source Bureau Chief

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1 Permit Scope

Purpose

1.1 This is a modified permit to construct (PTC) for an existing clay storage silo and associated baghouse control equipment.

[11/18/2020]

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-027-00034 issued on February 21, 1996.

[11/18/2020]

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	<u>Area Emissions at Feed and Dryer</u> <ul style="list-style-type: none"> • Primary Crusher • Drying Operations • Conveyors 	<u>Baghouse controlling area emissions at feed and Crusher (Baghouse DC-1):</u> Manufacturer: Donaldson Torit Model: TD3060 Type: Pulse-jet cartridge PM ₁₀ control efficiency: 99.8% <u>Baghouse controlling area emissions at feed and crusher (Baghouse DC-2):</u> Manufacturer: Donaldson Torit Model: TD970 Type: Pulse-jet cartridge PM ₁₀ control efficiency: 99.8%
	Rotary Drier	<u>Dryer Baghouse (Baghouse DC-4):</u> Manufacturer: Donaldson Torit Model: TD4600 Type: Pulse-jet cartridge PM ₁₀ control efficiency: 99.8%
	<u>Area Emissions at Secondary Crusher</u> <ul style="list-style-type: none"> • Secondary Crusher 	<u>Baghouse controlling area emissions at secondary crusher (Baghouse DC-3):</u> Manufacturer: Donaldson Torit Model: TD970 Type: Pulse-jet cartridge PM ₁₀ control efficiency: 99.8%
	<u>Clay Storage Silo (Inlet):</u> Manufacturer: A.O. Smith Model: 180 ton Manufacture Date: 1997	<u>Silo Inlet Baghouse (Baghouse DC-7):</u> Manufacturer: Airlanco Model: 86 Ser. 4BAC55 PM ₁₀ control efficiency: 99.0%
	Railcar Loading	<u>Silo Outlet Baghouse (Baghouse DC-8):</u> Manufacturer: Airlanco Model: 86 Ser. 4BAC55 PM ₁₀ control efficiency: 99.0%
	Back-end Conveyance and Bagging	<u>Baghouse DC-5:</u> Manufacturer: Donaldson Torit Model: TD970 Type: pulse-jet cartridge PM ₁₀ control efficiency: 99.8% <u>Baghouse DC-6:</u> Manufacturer: Torit Model: 130-AS Type: shaker PM ₁₀ control efficiency: 99.8%

2 Clay Processing and Storage Equipment

2.1 Process Description

Clay is stored on-site in two piles. The piles are transferred by front end loader to a hopper, conveyed to a primary crusher, and stored in a 15 ton surge bin. The bin feeds a proprietary process which feeds a rotary dryer that combusts natural gas. The dried ore is crushed and pneumatically conveyed to a storage silo. The product is then packaged in plastic lined bulk bags or loaded in to a train car. The clay from the outside bulk load out silo drops by gravity from the bottom through a rotary airlock on to a covered conveyor belt with scale. The clay is conveyed on the belt to a loading chute that is connected by dust tight connection to the railcar. The conveyor belt and chute are enclosed with a shroud and the dust that is entrained by the air inside due to the movement of the clay is filtered by a second dust collector at the bottom of the silo. All processes except for the bulk load out silo are inside a building.

[11/18/2020]

2.2 Control Device Descriptions

Table 2.1 Control Device Description

Emissions Units / Processes	Control Devices	Emission Points
Crusher and Mill	Baghouses DC-1, DC-2, DC-3, DC-, DC-5, DC-6	2,4,5
Conveyors		
Rotary Dryer	Baghouse DC-4	1
Storage Silo (Pneumatic Conveyance Exhaust)	Baghouse DC-7	7-A
Truck or Railcar Loading	Baghouse DC-8	7-B

[11/18/2020]

Emission Limits

2.3 Emission Limits

The emissions from the storage silo and loadout stacks shall not exceed any corresponding emissions rate limits listed in Table 2.2.

Table 2.2 Storage Silo and Loadout Emission Limits^(a)

Source Description	PM ₁₀ ^(b)	
	lb/hr ^(c)	T/yr ^(d)
Storage Silo	0.4	0.5
Truck/Railcar Loading	3.3	0.5

- In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
- 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.
- 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.
- Tons per any consecutive 12-calendar month period.

[11/18/2020]

2.4 Opacity Limit

In accordance with IDAPA 58.01.01.625, the permittee shall not discharge any air pollutant into the atmosphere from any point of emission for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period which is greater than twenty percent (20%) opacity.

Operating Requirements

2.5 Allowable Materials

The permittee shall only process common clay. Specifically, the permittee shall not process any material, with the exception of common clay, that meets the definition of ‘Nonmetallic Mineral’ as defined in 40 CFR 60.671 or that would cause the permittee to meet the definition of a ‘Mineral Processing Plant’ as defined in 40 CFR 60.731. These materials include: alumina, ball clay, bentonite, diatomite, feldspar, fire clay, fuller’s earth, gypsum, industrial sand, kaolin, lightweight aggregate, magnesium compounds, perlite, roofing granules, talc, titanium dioxide, vermiculite, sand and gravel, rock salt, sodium compounds, gilsonite, talc and pyrophyllite, Boron, fluorospar, perlite, mica, and kyanite.

[11/18/2020]

2.6 Crusher Capacity Requirement

The cumulative rated capacity of all initial crushers shall not exceed 10 T/hr per the manufacturer’s specifications. An initial crusher is any crusher into which nonmetallic minerals can be fed without prior crushing in the plant.

[11/18/2020]

2.7 Storage Silo Loadout Limit

The total amount of clay loaded from the storage silo into railcars and trucks shall not exceed 5,000 tons per consecutive 12-month period (T/yr)

[11/18/2020]

2.8 Control of Fugitive Dust

In accordance with IDAPA 58.01.01.650, the permittee shall take reasonable precautions to prevent particulate matter from becoming airborne. Some of these reasonable precautions include:

- The application of dust suppressants to, or the covering of, dirt roads, material stockpiles, and other surfaces which can create dust;
- The use of hoods, fans, and control equipment to enclose and vent the handling of dusty materials;
- The covering of open bodied trucks transporting materials likely to give rise to airborne dusts; and
- The paving of roadways and their maintenance in a clean condition.

[11/18/2020]

2.9 Baghouse Operation

The permittee shall use a baghouse to control emissions from the storage silo and truck/railcar loading. The baghouse shall be operated in accordance with the manufacturers recommendations.

[11/18/2020]

Monitoring and Recordkeeping Requirements

2.10 Storage Silo Loadout Monitoring

Each calendar month, the permittee shall monitor and record the total amount of clay loaded from the storage silo into trucks and railcars for the previous month in tons per month. Clay loadout shall be determined by summing the monthly loadout over the previous consecutive 12-month period to demonstrate compliance with the Storage Silo Loadout Limit Permit Condition.

[11/18/2020]

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]