STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

Brad Little, Governor
John Tippets, Director

April 16, 2020

Howard Watts, Corporate Secretary
Sunroc Corporation
730 N 1500 W
Orem, Utah 84057

RE: Facility ID No. 027-00094, Sunroc Corporation, Caldwell
Final Permit Letter, DEQ Initiated Permit Reissuance

Dear Mr. Watts:

The Department of Environmental Quality (DEQ) is reissuing Permit to Construct (PTC) No. P-2009.0004, Project 62426, to Sunroc Corporation. The purpose of the reissuance is to change the boiler hours of operation recordkeeping requirement from a daily to a monthly requirement. This error was in Permit Condition 5.5 and has been corrected.

This permit is effective immediately and replaces PTC No. P-2009.0004, issued on April 7, 2020. This permit does not release Sunroc Corporation from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances. The accompanying Statement of Basis document remains unchanged.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting 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,

Mike Simon
Stationary Source Program Manager
Air Quality Division

MS/cd

Enclosure

Permit No. P-2009.0004 Project 62426

# Air Quality

# PERMIT TO CONSTRUCT

| | |
|---|---|
| **Permittee** | Sunroc Corporation |
| **Permit Number** | P-2009.0004 |
| **Project ID** | 62426 |
| **Facility ID** | 027-00094 |
| **Facility Location** | 10340 Hwy 20<br>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** April 16, 2020

**Chris Duerschner, Permit Writer**

**Mike Simon, Stationary Source Manager**

# Contents

# 1 Permit Scope

## Purpose

**1.1** This is a revised Permit to Construct (PTC) to change the boiler hours of operation recordkeeping requirement in permit condition 5.5 from a daily to a monthly requirement.

**[4/16/2020]**

**1.2** Those permit conditions which 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-2009.0004 issued on April 7, 2020.

**[4/16/2020]**

## 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 | Material Transfer Points:<br>Materials handling<br>Concrete aggregate transfers<br>Truck unloading of aggregate<br>Aggregate conveyor transfers<br>Aggregate handling | Maintaining the moisture content in ¼" or smaller aggregate material at 1.5% by weight, using water sprays, using shrouds, or other emissions controls |
| 3 | Central mix concrete batch plant with a 12 cubic yard Erie tilt mixer and a four compartment storage bin<br>Manufacturer: Erie Strayer Co.<br>Model: N/A<br>Max. Hourly Production: 260 $yd^3$/hr<br>Max. Daily Production: 6,240 $yd^3$/day<br>Max. Annual Production: 2,277,600 $yd^3$/yr | Central Mix Dust Collector<br>Manufacturer: C&W<br>Model: BP-790<br>Filtration area: 785 $ft^2$<br>Blower: 5,000 acfm<br>Cleaning mechanism: Pulse Jet<br>$PM_{10}$ control efficiency: 99.0% |
| | Three compartment (North, Mid, South) cement storage bin | Cement Silo Dust Collectors (3)<br>Manufacturer[(a)]: C&W<br>Model: LPR-6-S<br>Cleaning mechanism: Pulse Jet<br>$PM_{10}$ control efficiency: 99.99% |
| | Central mix 12 cubic yard cement weigh batcher | Cement Weigh Batcher Dust Collector<br>Manufacturer: C&W<br>Model: CP-35<br>Filtration area: 36 $ft^2$<br>Blower: 140 acfm<br>Cleaning mechanism: Pulse jet<br>$PM_{10}$ control efficiency: 99.99% |

**Table 1.1 Regulated Sources (Continued)**

| Permit Section | Source | Control Equipment |
|---|---|---|
| 4 | Truck mix concrete batch plant with an 8 cubic yard weigh hopper and a three-stage aggregate storage bin<br>Manufacturer: Vince Hagan Co.<br>Model: 8300-65A<br>Max. Hourly Production: 70 cy/hr<br>Max. Daily Production: 1,680 cy/day<br>Max. Annual Production: 613,200 cy/yr | Cement Silo Dust Collector<br>Manufacturer: C&W<br>Model: VHW-160<br>Cleaning mechanism: Electric vibrator<br>$PM_{10}$ control efficiency: 99.8% |
| | Portable Chain Conveyor<br>Manufacturer: RBT<br>Model: 3600 | Portable Chain Conveyor Dust Collector<br>Manufacturer[a]: Donaldson<br>Model: UMA-100<br>Filtration area: 100 $ft^2$<br>Cleaning mechanism: Shaker<br>$PM_{10}$ control efficiency: 99.4% |
| | Cement Storage Silo | Railroad Siding Silo Dust Collector<br>Manufacturer: C&W<br>Model: CP-305<br>Filtration area: 356 $ft^2$<br>Cleaning mechanism: Pulse jet<br>$PM_{10}$ control efficiency: 99.99% |
| 5 | Boiler<br>Manufacturer: Kemco<br>Model: Thermefficient-100<br>Manufacture date: April 2005<br>Heat input rating: 9.9 MMBtu/hr<br>Fuel: Natural gas/LNG | N/A |

[a] The storage silo baghouses are process equipment as they are part of the physical and operational design of the silos; therefore, the potential to emit does not have to be federally enforceable when calculating PTE from the silo's. $PM_{10}$ controlled emission factors were used when determining PTE and for modeling purposes.

**[4/7/2020]**

# 2 Facility-Wide Conditions

## Fugitive Dust Control

### 2.1 Reasonable Control of Fugitive Emissions

In accordance with IDAPA 58.01.01.650-651, all reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

The permittee shall monitor and maintain records of the frequency and the method(s) used (e.g., water, chemical dust suppressants) to reasonably control fugitive dust 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.

The permittee shall conduct a daily facility-wide inspection of potential sources of fugitive dust emissions, during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive dust emissions are effective. If fugitive dust 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 dust 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 dust emissions, and the date the corrective action was taken.

### 2.2 Fugitive Emissions Controls

In accordance with IDAPA 58.01.01.650 and 651, the concrete batch plant shall employ efficient fugitive dust controls. The Permittee shall implement and maintain, but are not limited to, the following controls:

- Application, where practical, of water, or suitable chemicals to, or the covering of, dirt roads, material stockpiles, and other surfaces which can create dust. This fugitive dust control is employed at this facility and the Permittee shall be able to demonstrate this to DEQ staff.
- Installation and use, where practical, of hoods, fans, and fabric filters systems to enclose the handling of dusty materials. This fugitive dust control is employed at this facility and the Permittee shall be able to demonstrate this to DEQ staff.

Good operating practices, including water spraying or other suitable measures, shall be employed to prevent dust generation and atmospheric entrainment during operations such as stockpiling, screen changing and general maintenance. The Permittee shall be able to demonstrate this to DEQ staff.

## Odors

### 2.3 Odors

The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids into the atmosphere in such quantities as to cause air pollution in accordance with IDAPA 58.01.01.776.01.

## Monitoring and Recordkeeping Requirements

### 2.4 Fugitive Dust Monitoring and Recordkeeping

The permittee shall conduct a facility-wide inspection of potential sources of visible fugitive emissions during daylight hours and under normal operating conditions once each day that the concrete batch plant operates, to demonstrate compliance with the Reasonable Control of Fugitive Emissions and the Fugitive Emissions Controls permit conditions. The inspection shall consist of a see/no see evaluation for each potential source of visible fugitive emissions. If any visible fugitive emissions are present from any source of fugitive emissions, the permittee shall take appropriate corrective action as expeditiously as practicable to mitigate the visible fugitive emissions.

The permittee shall maintain records of the results of each see/no see evaluation of visible fugitive emissions inspection. The records shall include, at a minimum, the date and results of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time visible fugitive emissions are present (if observed), any corrective action taken in response to the visible fugitive emissions, and the date corrective action was taken.

### 2.5 Odor Complaints

The permittee shall maintain records of all odor complaints received to demonstrate compliance with the Odors permit condition. The permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date 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.

### 2.6 Recordkeeping

All monitoring and recordkeeping documentation required by this permit shall be maintained in accordance with the Recordkeeping general provision.

# 3 Central Mix Concrete Batch Plant

## 3.1 Process Description

This operation is a central mix concrete batch plant. The components of the plant are as follows: a four compartment aggregate storage bin, a 12 cubic yard aggregate batcher, three cement storage silos, a 12 cubic yard cement batcher, and a 12 cubic yard tilt mixer. The central mix plant combines sand, gravel, cement, and water to produce concrete.

## 3.2 Control Device Descriptions

**Table 3.1 Central Mix Concrete Batch Plant Description**

| Emissions Units / Processes | Control Devices | Emission Points |
|---|---|---|
| Central mix concrete batch plant with a 12 cubic yard Erie tilt m ixer and a four compartment aggregate storage bin | Central Mix Dust Collector<br>Manufacturer[a]: C&W<br>Model: BP-790<br>Filtration area: 785 $ft^2$<br>Blower: 5,000 acfm<br>Cleaning mechanism: Pulse Jet<br>$PM_{10}$ control efficiency: 99.0% | CDCBH |
| Central mix 12 cubic yard cement weigh batcher | Cement Weigh Batcher Dust Collector<br>Manufacturer: C&W<br>Model: CP-35<br>Filtration area: 36 $ft^2$<br>Blower: 140 acfm<br>Cleaning mechanism: Pulse jet<br>$PM_{10}$ control efficiency: 99.99% | WHBH |
| Three compartment (North, Mid, and South) cement storage bin | Cement Silo Dust Collectors (3)<br>Manufacturer[a]: C&W<br>Model: LPR-6-S<br>Cleaning mechanism: Pulse Jet<br>$PM_{10}$ control efficiency: 99.99% | NSILOBH<br>MSILOBH<br>SSILOBH |

a) As discussed previously, the baghouses are considered process equipment.

# Emission Limits

## 3.3 Emission Limits

The $PM_{10}$ emissions from the central mix dust collector, the three silo dust collectors, and the weight batcher dust collector stacks shall not exceed any corresponding emissions rate limits listed in Table 3.2.

**Table 3.2 Concrete Batch Plant Emission Limits[a]**

| Source Description | $PM_{10}/PM_{2.5}$ [b] | |
|---|---|---|
| | lb/hr [c] | T/yr [d] |
| Central mix concrete batch plant | 0.325 | 1.54 |
| Cement delivery, North silo | 0.023 | 0.0996 |
| Cement delivery, Mid silo | 0.023 | 0.0996 |
| Cement delivery, South silo | 0.023 | 0.0996 |
| Central mix weight batcher loading | 0.00098 | 0.00428 |

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 and two point five (2.5) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006. Note:

$PM_{10}/PM_{2.5}$ is a 24 hr daily average calculation.

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.

**[4/27/2009]**

### 3.4 Opacity Limit

Emissions from any stack, vent, or functionally equivalent opening associated with the CBP facility 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. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this section.

## Operating Requirements

### 3.5 Cement Throughput Limits

To demonstrate compliance with the Emissions Limits Permit Condition cement throughput for the North, Mid, and South cement storage silos shall not exceed 642,283 tons combined per any consecutive 12-month period.

### 3.6 Concrete Production Limit

To demonstrate compliance with the Emissions Limits Permit Condition concrete production for the central mix concrete batch plant shall not exceed 2,277,600 cubic yards per any consecutive 12-month period.

**[4/27/2009]**

### 3.7 Central Mix Dust Collector, the North, Mid, and South Cement Storage Silos, and the Central Mix Weigh Batcher Dust Collector Systems

The permittee shall not operate the central mix concrete plant, the North, Mid, and South cement storage silos, or the central mix weigh batcher unless central mix concrete plant, the North, Mid, and South cement storage silos, or the central mix weigh batcher dust collector systems are installed and operating.

The permittee shall monitor and record visible emissions from the central mix concrete plant, the North, Mid, and South cement storage silos, or the central mix weigh batcher dust collector systems **once per day** when operating to demonstrate compliance with the Opacity Limit Permit Condition. The inspection shall consist of a see/no see evaluation for the central mix concrete plant, the North, Mid, and South cement storage silos, or the central mix weigh batcher dust collector systems. If any visible emissions are present from the central mix concrete plant, the North, Mid, and South cement storage silos, or the central mix weigh batcher dust collector systems, 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 opacity 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.

**[4/27/2009]**

### 3.8 Baghouse/Filter System Procedures

Within 60 days of initial start-up, the permittee shall have developed a Baghouse/Filter System Procedures document for the inspection and operation of the baghouses/filter systems which control emissions from the central mix concrete plant, the North, Mid, and South cement storage silos, or the central mix weigh batcher. The Baghouse/Filter System Procedures document shall be a permittee developed document independent of the manufacturer supplied operating manual but may include summaries of procedures included in the manufacturer supplied operating manual.

The Baghouse/Filter System Procedures document shall describe the procedures that will be followed to comply with the General Compliance General Provision and shall contain requirements for **daily** see-no-see visible emissions inspections of the baghouse. The inspection shall occur during daylight hours and under normal operating conditions.

The Baghouse/Filter System Procedures document shall also include a schedule and procedures for corrective action that will be taken if visible emissions are present from the baghouse at any time. At a minimum the document shall include:

- Procedures to determine if bags or cartridges are ruptured; and
- Procedures to determine if bags or cartridges are not appropriately secured in place.

The Permittee shall maintain records of the results of each baghouse/filter system inspections in accordance with the Monitoring and Recordkeeping General Provision. The records shall include, but not be limited to, the following:

- Date and time of inspection,
- Equipment inspected (e.g. exterior housing of baghouse, fan motor, auger, inlet air ducting);
- Description of whether visible emissions were present, and if visible emissions were present a description of the corrective action that was taken.
- Date corrective action was taken.

The Baghouse/Filter System Procedures document shall be submitted to DEQ within 60 days of permit issuance and shall contain a certification by a responsible official. Any changes to the Baghouse/Filter System Procedures document shall be submitted within 15 days of the change.

The Baghouse/Filter System Procedures document shall also remain on site at all times and shall be made available to DEQ representatives upon request.

The operating and monitoring requirements specified in the Baghouse/Filter System Procedures document are incorporated by reference to this permit and are enforceable permit conditions.

**[4/27/2009]**

## Fugitive Emissions

### 3.9 Visible Fugitive Emission Limits at the Property Boundary

In accordance with IDAPA 58.01.01.211.01, Reasonable Conditions, the permittee shall control fugitive emissions generated by operations associated with the CBP facility to ensure that visible

fugitive emissions do not extend beyond the facility property boundary. Visible fugitive emissions shall be determined using see/no see observations. Observable emissions extending beyond the property boundary are considered evidence that fugitive emissions are not being reasonably controlled.

**[4/27/2009]**

### 3.10 Reasonable Control of Fugitive Emissions

All reasonable precautions shall be taken to prevent fugitive dust from becoming airborne in accordance with IDAPA 58.01.01.650 and 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 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, where practical, of hoods, fans, 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.

### 3.11 Fugitive Dust Control Best Management Practices

3.11.1 The permittee shall immediately implement a strategy or strategies to control fugitive dust emissions whenever:

- Visible fugitive emissions generated by activities associated with this CBP facility are observed leaving the facility boundary. For the purposes of this permit condition, visible emissions shall be determined on a see/no see basis, and the facility boundary shall be defined by the facility property boundary.

3.11.2 For the purpose of the following conditions, if any visible fugitive emissions are present from these sources for the duration described below, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 22 visible emissions (VE) test.

- Visible fugitive emissions are greater than 20% from any material transfer point for a period or periods aggregating more than one minute in any 60-minute period. Reasonable transfer point fugitive control strategies for this facility include, but are not limited to, enclosing the transfer points, and limiting the drop height.
- Visible fugitive emissions from wind erosion on stockpiles exceed 20% opacity for a period or periods aggregating more than one minute in any 60-minute period. Reasonable stockpile wind erosion control strategies for this facility include, but are not limited to, limiting the height of the stockpiles, limiting the disturbance of stockpiles or covering the

stockpiles during windy conditions, enclosing the piles in a 3-sided bunker or storage bin, and application of water or a chemical dust suppressant onto the surface of the stockpile.

- Visible fugitive emissions from vehicle traffic on any paved or unpaved roads within the facility boundary exceed 20% opacity for a period or periods aggregating more than one minute in any 60-minute period. Reasonable control strategies for this facility include but are not limited to limiting vehicle traffic, limiting vehicle speed, application of water or a chemical dust suppressant to the surface of the road, application of gravel to the surface of unpaved roads, sweeping or water sprays to clean the surface of a paved road, and grates, water washes, or other suitable methods to prevent track-out onto paved roads.

**[4/27/2009]**

### 3.12 Fugitive Emissions Monitoring and Recordkeeping

3.12.1 The permittee shall conduct a facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions once each calendar day the CBP facility operates, 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. 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.

3.12.2 The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date that each complaint was received and a description of the following: the complaint, any corrective action taken, and the date the corrective action was taken.

3.12.3 The permittee shall monitor and maintain records of the frequency and the method(s) used (e.g., water, chemical dust suppressants) to reasonably control fugitive dust emissions.

**[4/27/2009]**

## Monitoring and Recordkeeping Requirements

### 3.13 Cement Throughput Monitoring

To demonstrate compliance with the cement throughput limit the permittee shall monitor and record cement throughput for the North, Mid, and South cement storage silos monthly and annually. Annual throughput shall be determined by summing total monthly concrete production over each previous consecutive 12-month period.

### 3.14 Concrete Production Monitoring

To demonstrate compliance with the concrete production limit the permittee shall monitor and record concrete production from the central mix concrete batch plant monthly and annually. Annual production shall be determined by summing total monthly concrete production over each previous consecutive 12-month period.

**[4/27/2009]**

### 3.15 Visible Emissions Monitoring and Recordkeeping

The permittee shall conduct a facility-wide inspection of potential sources of visible emissions during daylight hours and under normal operating conditions **once each calendar day**, to demonstrate compliance with the opacity limit. The inspection shall consist of a see/no see

evaluation for each potential source of visible emissions. 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 in 40 CFR 60.11 and as specified 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 actions 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 opacity 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.

**[4/27/2009]**

### 3.16 Recordkeeping

The permittee shall comply with the recordkeeping requirements of the Monitoring and Recordkeeping General Provision.

**[4/27/2009]**

# 4 Truck Mix Concrete Batch Plant

## 4.1 Process Description

This operation is a truck mix concrete batch plant. The components of the truck mix plant are as follows: a three-stage aggregate storage bin, one cement storage silo, and an 8 cubic yard weigh hopper. The truck mix plant combines sand, gravel, and cement and delivers it dry to the cement truck mixer where it is mixed with water to produce concrete.

## 4.2 Control Device Descriptions

**Table 4.1 Truck Mix Concrete Batch Plant Description**

| Emissions Units / Processes | Control Devices | Emission Points |
|---|---|---|
| Truck mix concrete batch plant with an 8 cubic yard weigh hopper and a three-stage aggregate storage bin | Cement Silo Dust Collector<br>Manufacturer[a]: C&W<br>Model: VHW-160<br>Cleaning mechanism: Electric vibrator<br>$PM_{10}$ control efficiency: 99.8% | CDCBH |
| Portable chain conveyor | Portable Chain Conveyor Dust Collector<br>Manufacturer[a]: Donaldson<br>Model: UMA-100<br>Filtration area: 100 $ft^2$<br>Cleaning mechanism: Shaker<br>$PM_{10}$ control efficiency: 99.4% | WHBH |
| Cement storage silo | Railroad Siding Silo Dust Collector<br>Manufacturer: C&W<br>Model: CP-305<br>Filtration area: 356 $ft^2$<br>Cleaning mechanism: Pulse jet<br>$PM_{10}$ control efficiency: 99.99% | WHBH |

a) As discussed previously, the baghouses are considered process equipment.

# Emission Limits

## 4.3 Emission Limits

The $PM_{10}$ emissions from the truck mix dust collector, the portable chain conveyor dust collector, and the cement storage silo dust collector stacks shall not exceed any corresponding emissions rate limits listed in Table 4.2.

**Table 4.2 Concrete Batch Plant Emission Limits[a]**

| Source Description | $PM_{10}/PM_{2.5}$ [b] | |
|---|---|---|
| | lb/hr[c] | T/yr[d] |
| Truck mix concrete batch plant | 0.0184 | 0.0804 |
| Portable chain conveyor | 0.028 | 0.121 |
| Cement storage silo | 0.028 | 0.121 |

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 and two point five (2.5) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006. Note: $PM_{10}/PM_{2.5}$ is a 24 hr daily average calculation.

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.

### 4.4 Opacity Limit

Emissions from any stack, vent, or functionally equivalent opening associated with the truck mix concrete batch plant facility 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. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this section.

**[4/27/2009]**

## Operating Requirements

### 4.5 Cement Throughput Limit

To demonstrate compliance with the Emissions Limits Permit Condition cement throughput for the truck mix cement storage silo shall not exceed 172,922.4 tons per any consecutive 12-month period.

**[4/27/2009]**

### 4.6 Concrete Production Limit

To demonstrate compliance with the Emissions Limits Permit Condition concrete production for the truck mix concrete batch plant shall not exceed 613,200 cubic yards per any consecutive 12-month period.

**[4/27/2009]**

### 4.7 Truck Mix Dust Collector, Portable Chain Conveyor, and the Cement Silo Dust Collector System

The permittee shall not operate the truck mix concrete plant, the portable chain conveyor, or the cement storage silo unless the truck mix dust collector, the portable chain conveyor dust collector, and the cement silo dust collector systems are installed and operating.

The permittee shall monitor and record visible emissions from the truck mix dust collector, the portable chain conveyor dust collector, and the cement silo dust collector systems once per day when operating to demonstrate compliance with the Opacity Limit Permit Condition. The inspection shall consist of a see/no see evaluation for the truck mix dust collector, the portable chain conveyor dust collector, and the cement silo dust collector systems. If any visible emissions are present from the truck mix dust collector, the portable chain conveyor dust collector, and the cement silo dust collector systems, 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 opacity 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.

**[4/27/2009]**

### 4.8 Baghouse/Filter System Procedures

Within 60 days of initial start-up, the permittee shall have developed a Baghouse/Filter System Procedures document for the inspection and operation of the baghouses/filter systems which control emissions from the truck mix concrete plant, the portable chain conveyor, or the cement storage silo. The Baghouse/Filter System Procedures document shall be a permittee developed document independent of the manufacturer supplied operating manual but may include summaries of procedures included in the manufacturer supplied operating manual.

The Baghouse/Filter System Procedures document shall describe the procedures that will be followed to comply with the General Compliance General Provision and shall contain requirements for **daily** see-no-see visible emissions inspections of the baghouse. The inspection shall occur during daylight hours and under normal operating conditions.

The Baghouse/Filter System Procedures document shall also include a schedule and procedures for corrective action that will be taken if visible emissions are present from the baghouse at any time. At a minimum the document shall include:

- Procedures to determine if bags or cartridges are ruptured; and
- Procedures to determine if bags or cartridges are not appropriately secured in place.

The Permittee shall maintain records of the results of each baghouse/filter system inspections in accordance with the Monitoring and Recordkeeping General Provision. The records shall include, but not be limited to, the following:

- Date and time of inspection,
- Equipment inspected (e.g. exterior housing of baghouse, fan motor, auger, inlet air ducting);
- Description of whether visible emissions were present, and if visible emissions were present a description of the corrective action that was taken.
- Date corrective action was taken.

The Baghouse/Filter System Procedures document shall be submitted to DEQ within 60 days of permit issuance and shall contain a certification by a responsible official. Any changes to the Baghouse/Filter System Procedures document shall be submitted within 15 days of the change.

The Baghouse/Filter System Procedures document shall also remain on site at all times and shall be made available to DEQ representatives upon request.

The operating and monitoring requirements specified in the Baghouse/Filter System Procedures document are incorporated by reference to this permit and are enforceable permit conditions.

**[4/27/2009]**

## Monitoring and Recordkeeping Requirements

### 4.9 Cement Throughput Monitoring

To demonstrate compliance with the cement throughput limit the permittee shall monitor and record cement throughput for the cement storage silo monthly and annually. Annual throughput shall be determined by summing total monthly cement throughput over each previous consecutive 12-month period.

**[4/27/2009]**

## 4.10 Concrete Production Monitoring

To demonstrate compliance with the concrete production limit the permittee shall monitor and record concrete production from the truck mix concrete batch plant monthly and annually. Annual production shall be determined by summing total monthly concrete production over each previous consecutive 12-month period.

**[4/27/2009]**

## 4.11 Visible Emissions Monitoring and Recordkeeping

The permittee shall conduct a facility-wide inspection of potential sources of visible emissions during daylight hours and under normal operating conditions **once each calendar day**, to demonstrate compliance with the opacity limit. The inspection shall consist of a see/no see evaluation for each potential source of visible emissions. 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 in 40 CFR 60.11 and as specified 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 actions 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 opacity 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.

**[4/27/2009]**

## 4.12 Recordkeeping

The permittee shall comply with the recordkeeping requirements of the Monitoring and Recordkeeping General Provision.

**[4/27/2009]**

# 5 Boiler

### 5.1 Process Description

The boiler will be used to heat water in cold weather prior to use for the mixing of concrete.

**[4/7/2020]**

### 5.2 Control Device Description

**Table 4.1 Boiler Descriptions**

| Emissions Units / Processes | Control Devices | Emission Points |
|---|---|---|
| Boiler:<br>Manufacturer: Kemco<br>Model: Thermefficient-100<br>Heat input rating: 9.9 MMBtu/hr<br>Fuel: Natural Gas | No Control Device | Boiler Stack<br>Diameter: 24 in.<br>Height: 50 ft.<br>Temperature: 60 °F<br>Flow Rate: 1800 acfm |

**[4/7/2020]**

## Operating Requirements

### 5.3 Fuel Restrictions

The boiler shall exclusively burn natural gas.

**[4/7/2020]**

### 5.4 Annual Hours of Operation

Operation of the boiler shall not exceed 2,600 hours per consecutive 12-month period (hr/yr).

**[4/7/2020]**

## Monitoring and Recordkeeping Requirements

### 5.5 Boiler Operation Recordkeeping

The permittee shall monitor and record the boiler operation in hours per month. Consecutive 12-months of boiler operation shall be determined by summing the monthly operation over the previous consecutive 12-month period to demonstrate compliance with the Annual Hours of Operation permit condition.

**[4/16/2020]**

# 6 General Provisions

## General Compliance

**6.1** 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.]**

**6.2** 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]**

**6.3** 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

**6.4** 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

**6.5** 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]**

**6.6** 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

**6.7** 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.

**6.8** 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.

**6.9** 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

**6.10** 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

**6.11** 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

**6.12** 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

**6.13** 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

**6.14** 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

**6.15** 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

**6.16** 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]**