STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

April 23, 2009

Certified Mail No. 71900596001040000107

Preston Rufe, Environmental Manager
Formation Capital Corporation, U.S.
812 Shoup Street
Salmon, Idaho 83467

RE: Facility ID No. 059-00010, Formation Capital Corporation, U.S., Salmon
Final Permit Letter

Dear Mr. Rufe:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2008.0169 to Formation Capital Corporation for the Idaho Cobalt Project located near Cobalt, Idaho, in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho).

This permit is based on your permit application received on November 3, 2008. This permit is effective immediately. This permit does not release Formation Capital Corporation from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

Pursuant to General Provision 5 of your permit, it is required that Construction and Operation Notification be provided. Please provide this information as listed to DEQ's Idaho Falls Regional Office, 900 N. Skyline, Suite B, Idaho Falls, ID 83402, Fax (208) 528-2695.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with Maria Miles, Air Quality Analyst, at (208) 528-2650 to review and discuss the terms and conditions of this permit. Should you choose to schedule this meeting, DEQ recommends 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 Morrie Lewis at (208) 373-0502 or Morrie.Lewis@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\ML\hp Project No. P-2008.0169

Enclosures

Air Quality **PERMIT TO CONSTRUCT** **State of Idaho** **Department of Environmental Quality**	**PERMIT No.:** P-2008.0169 **FACILITY ID No.:** 059-00010 **AQCR:** 63 **CLASS:** B **ZONE:** 11 **SIC:** 1061 **NAICS:** 212299 **UTM COORDINATE (km):** 707.5, 5000.8

1. **PERMITTEE** Formation Capital Corporation, U.S.			
2. **PROJECT** Initial permit to construct – Idaho Cobalt Project mining and mineral processing facility			
3. **MAILING ADDRESS** 812 Shoup Street	**CITY** Salmon	**STATE** ID	**ZIP** 83467
4. **FACILITY CONTACT** Preston Rufe	**TITLE** Environmental Manager	**TELEPHONE** (208) 756-4578 ext. 24	
5. **RESPONSIBLE OFFICIAL** Guy Jeske	**TITLE** General Manager	**TELEPHONE** (208) 756-4578 ext. 4	
6. **EXACT PLANT LOCATION** 26 miles west of Salmon; near Cobalt, Idaho		**COUNTY** Lemhi	
7. **GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS** Mining, milling, and processing of cobalt ore			

8. **PERMIT AUTHORITY**

This permit is issued according to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.200 through 228, and 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.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) 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; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the 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.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes in design, equipment or operations may be considered a modification. Modifications are subject to DEQ review in accordance with IDAPA 58.01.01.200 through 228 of the Rules for the Control of Air Pollution in Idaho.

MORRIE LEWIS, PERMIT WRITER
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE MODIFIED/REVISED:	
DATE ISSUED:	**April 23, 2009**

MIKE SIMON, STATIONARY SOURCE PROGRAM MANAGER
DEPARTMENT OF ENVIRONMENTAL QUALITY

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Acronyms, Units, and Chemical Nomenclature

acfm	actual cubic feet per minute
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EPA	U.S. Environmental Protection Agency
g/dscm	grams per dry standard cubic meter
gph	gallons per hour
HP	horsepower
hr/yr	hours per consecutive 12 calendar month period
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
kW	kilowatts
lb/hr	pounds per hour
NAICS	North American Industry Classification System
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NSPS	New Source Performance Standards
O&M	operations and maintenance
PM	particulate matter
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppm	parts per million
PTC	permit to construct
SIC	Standard Industrial Classification
SO_2	sulfur dioxide
SO_x	sulfur oxides
TAP	toxic air pollutants
T/day	tons per calendar day
T/hr	tons per hour
T/yr	tons per any consecutive 12 calendar month period
UTM	Universal Transverse Mercator
VOC	volatile organic compounds
$\mu g/m^3$	micrograms per cubic meter

1. PERMIT TO CONSTRUCT SCOPE

Purpose

1.1 This is an initial permit to construct (PTC) for a mining and mineral processing facility.

Regulated Sources

1.2 Table 1.1 lists all sources of regulated emissions in this PTC.

Table 1.1 SUMMARY OF REGULATED EMISSIONS SOURCES

Permit Section	Emission Unit ID No.	Source Description	Emissions Controls
2	EP201	Crusher Building Jaw Crusher, Cone Crusher Model: (electric-powered) Manufacture date: Spring 2009 Maximum capacity: 83.3 T/hr Maximum production: 1000.8 T/day (limited by ball mill capacity) Screen Model: (electric-powered) Manufacture date: Spring 2009 Maximum capacity: 83.3 T/hr Maximum production: 1000.8 T/day (limited by ball mill capacity) Materials transfer (inside Crusher Building)	Enclosed Building and Crushing Building Dust Collector Baghouse Stack Manufacturer: CPE Filters Model: 120-TNFD-420-C Control efficiency: ≥95% for PM/PM_{10} Minimum moisture content of 5% and reasonable controls
2	EP1401 EP1402	Concentrator Fine Ore Storage Bin Manufacturer: Boss Tank Model: 13311 Manufacture date: Spring 2009 Maximum capacity: 510 tons	Concentrator Building Fine Ore Storage Bin Vent Stack Manufacturer: CPE Filers Inc. Model: 72-BF-016-C Control efficiency: ≥75% for PM/PM_{10} Minimum moisture content of 5% and reasonable controls
2	EP1601 EP3001	Mining operations Ram and Sunshine Portals	Minimum moisture content of 5% and reasonable controls
2	EP1501 EP1502	Cement Storage Silo Manufacturer: Columbian Techtank Model: N/A Manufacture date: Spring 2009 Maximum capacity: 158 tons	Cement Storage Silo Baghouse/Cartridge Filter Stack Manufacturer: Ultra Industries Model: BB-25-58-IIG Control efficiency: 99.8% for PM/PM_{10}
2	(fugitives)	Materials transfer and storage piles	Minimum moisture content of 5% and reasonable controls
3	EP101	Emergency generator (or equivalent[a]) Date of construction: after August 2008 Maximum capacity: 800 kW Maximum operation: 100 hr/yr (non-emergency) Fuel: Diesel Maximum fuel consumption: 57.2 gph Maximum displacement: 2.54 liters/cylinder	None

a. "or equivalent" is defined as an emergency generator which has an equivalent or less maximum capacity (kW) and fuel consumption (gph) than listed in this table; which does not result in an increase in emissions; and which does not result in the emission of a toxic air pollutant not previously emitted.

2. MINING AND MINERAL PROCESSING

2.1 Process Description

The Idaho Cobalt Project facility mines and concentrates cobalt ore. The facility consists of a mine, a mineral processing plant, and ancillary facilities. The mine consists of two separate underground operations used to extract ore, the Ram and the Sunshine. The ore bodies contain cobalt and copper, and the mine ore production rate has been established at approximately 280,000 tons per year, or 800 tons per day assuming a 350-day-per-year operating schedule. The mineral processing plant or mill consists of the crusher building and the concentrator building. The mineral processing plant includes coarse and fine ore storage, an ore stockpile conveyor, a crushing, grinding, and flotation plant, pipelines, concentrate equipment, and shipping docks. Ancillary facilities include offices, warehouse, change rooms, shipping and receiving docks, emergency sleeping quarters, an emergency generator, and other structures or buildings necessary for operation.

The facility processes start with ore being extracted underground using drilling and blasting activities. Trucks will transport the ore out of the Ram or Sunshine mine portal. Ventilation of the underground operations is through the portal, with the ventilation system designed to turn over the air underground completely each hour. Ore is transported to the mineral processing plant at the crusher and concentrator buildings via tram or via trucks from the portal to the ore stockpile outside the crusher building. When using the tram, trucks exiting the mine will unload ore into a bin, from which the tram will be loaded. The tram will then carry the ore overland to transfer drops onto an ore or waste rock stockpile outside the crusher building. Waste materials from the portal or from the waste rock stockpile will be loaded into a truck and transported to the Tailing and Waste Storage facility (TWSF), involving transfer emission sources and wind erosion from the TWSF.

Ore from the ore stockpile outside the crusher building will be transported by front end loader to the primary crusher feed bin outside the crusher building, which is totally enclosed as it enters the crusher building. The ore is crushed and screened inside the crusher building. A dust collection system will route all particulates generated in the building through a baghouse before discharge to ambient air. The crushed and screened ore is transported from the crusher building to the fine ore bin outside the concentrator building via a conveyor system fully enclosed on the bottom and sides with no intermediate drops until it reaches a final enclosed drop to the fine ore bin. The drop into the fine ore bin, though fully covered, is considered a controlled emission source because displaced air within the bin is routed through filters atop the bin.

Ore from the fine ore bin is transferred into the concentrator building in a fully enclosed transfer. Upon entering the concentrator building, the ore is wetted into slurry to prevent dust generation and facilitate processing. All subsequent processes within the concentrator building involve wet or slurry materials. The concentrator building includes a cement silo on the east side. The silo is filled pneumatically with dried cement delivered by truck. Like the fine ore bin, the displaced air within the cement silo is routed to a filtered outlet. Cement is used to solidify non-product material in the ore for potential use in backfilling the mine, or for use in shotcrete used for wall stabilization inside the mine. Outflow from the cement silo into the concentrator building is fully enclosed, with the cement wetted promptly upon entering the building. Outflow from the concentrator building includes a small tailings pile on the south side that will be cleared daily and transported to the TWSF, and truckloads of recovered ore concentrate that will be transported offsite as saleable product.

2.2 Emissions Control Descriptions

The PM, PM_{10}, and arsenic emissions from the facility are controlled by baghouses/cartridge filters. Table 2.1 describes the control devices and control measures associated with the facility.

Table 2.1 CONTROL DESCRIPTIONS OF THE EMISSIONS SOURCES

Emissions Units / Processes	Emissions Control Devices	Emissions Sources
Mineral Processing Plant (NSPS, Subpart LL) Crusher Building Jaw crusher, cone crusher, and screen	Baghouse/cartridge filter	Crushing Building Dust Collector Baghouse Stack Exit height: 36 ft Exit diameter: 3 ft Exit air flow rate: 450 acfm
Concentrator Building fine ore storage bin	Baghouse/cartridge filter	Concentrator Building Fine Ore Storage Bin Vent Stack Exit height: 61 ft Exit diameter: 1.41 ft
Materials transfer (inside Crusher Building)	Baghouse/cartridge filter	Enclosed conveyor transfer to fine ore bin, Enclosed ore transfer to the Concentrator Building, Any bucket elevator, conveyor belt transfer point,
Materials transfer (fugitives)	Minimum moisture content of 5% and reasonable controls	storage bin, enclosed storage area, any other applicable source as listed in 40 CFR 60.380(a)
Mining operations	Minimum moisture content of 5% and reasonable controls	Drilling Blasting Mine portal and ventilation system Loader loading and unloading Material handling and materials transfer
Cement storage silo	Baghouse/cartridge filter	Cement Storage Silo Baghouse/Cartridge Filter Stack Exit height: 48 ft Exit diameter: 1.41 ft
Materials transfer points and storage piles (fugitives)	Minimum moisture content of 5% and reasonable controls	Loader loading and unloading Truck loading and unloading Tram loading and unloading Ore and waste rock stockpiles Dump to Tram Hopper Bin Dump to Crusher Building Feed Hopper Transport of refined ore offsite Stockpile outside the Concentrator Building

Emissions Limits

2.3 Opacity Limit

Emissions from any baghouse/cartridge filter stack or from any stack, vent, or other functionally equivalent opening associated with the mining operations, mineral processing plant, or the emergency generator shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required in IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

2.4 NSPS 40 CFR 60, Subpart LL – Standard for Particulate Matter

- In accordance with 40 CFR 60.382(a), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator shall cause to be discharged into the atmosphere from an affected facility any stack emissions that:
  - Contain particulate matter in excess of 0.05 grams per dry standard cubic meter (0.02 g/dscm).
  - Exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing emission control device.
- In accordance with 40 CFR 60.382(b), on and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from an affected facility any process fugitive emissions that exhibit greater than 10 percent opacity.

2.5 Emissions Limits

The arsenic emissions from the Crushing Building Dust Collector Baghouse Stack shall not exceed any corresponding emission rate limits listed in Table 2.2.

Table 2.2 CRUSHER EMISSION LIMITS[1]

Source Description	Arsenic[2]
	lb/hr
Crushing Building Dust Collector Baghouse Stack (EP201)	5.45E-04

1) In absence of any other credible evidence, compliance is assured by complying with this permit's operating, monitoring, and record keeping requirements.
2) TAP emission limit has been included in accordance with IDAPA 58.01.01.210.12.d.

2.6 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.

Operating Requirements

2.7 Material Throughput Limits

The permittee shall process ore as the raw material, and the maximum throughput through the primary crusher shall not exceed 280,000 tons per year to ensure compliance with Permit Condition 2.5.

2.8 Baghouses/Cartridge Filter Systems Control Equipment

The permittee shall install and operate the baghouses/cartridge filter systems listed in Table 2.1 to control PM, PM_{10}, and arsenic emissions from the Crusher Building to ensure compliance with the emission limits in Permit Condition 2.5 and in accordance with IDAPA 58.01.01.210.12.d and IDAPA 58.01.01.210.I4.e.

2.9 Material Moisture Content

The owner or operator shall ensure that all mined and waste material contains a minimum moisture content of 5% to control arsenic emissions from the facility, to ensure compliance with the emission limits Permit Condition 2.5 and in accordance with IDAPA 58.01.01.210.12.d and IDAPA 58.01.01.210.14.e. In absence of any other credible evidence, compliance with this permit condition is ensured by complying with the Fugitive Dust Control Plan required in Permit Condition 2.11.

2.10 Reasonable Control of Fugitive Emissions

All reasonable precautions shall be taken to prevent particulate matter 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 which 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 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, 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, when practical, 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.

2.11 Fugitive Dust Control Plan

The Permittee shall develop and maintain a Fugitive Dust Control Plan to ensure compliance with Permit Conditions 2.9 and 2.10 and in accordance with IDAPA 58.01.01.210.12.d and IDAPA 58.01.01.210.14.e.

- The Fugitive Dust Control Plan shall identify potential sources of fugitive dust and shall specify reasonable precautions for control of fugitive dust sources of arsenic. The Fugitive Dust Control Plan shall contain, at a minimum, the following information and requirements:
  - A list of all of the potential sources of fugitive dust from the facility.
  - The owner or operator shall at all times be observant of all sources of fugitive dust emissions and monitor control strategies at least once per day when operating.
  - Requirements for control strategies. A progressive control strategy may be used to reasonably control the emissions of fugitive dust. Progressive control strategy means that if the initial control strategy or strategies chosen do not adequately control fugitive dust emissions, the owner or operator shall employ successive control strategies as listed until fugitive dust control is achieved. Fugitive dust control shall be applied on a frequency such that visible emissions do not exceed any emission standard listed in this permit.
  - Requirements for inspection. Each day that the facility is operated, the permittee shall conduct a facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective in accordance with Permit Condition 2.10. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable.
  - Requirements for monitoring and recordkeeping. The permittee shall maintain records of the results of each fugitive emission 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. The permittee shall also record any citizen complaint, an evaluation of whether the complaint has merit, and a summary of the corrective action taken. A compilation of the most recent five years of records shall be kept onsite and made available to DEQ representatives upon request.
  - Requirements for training and orientation of employees about the requirements in the Fugitive Dust Control Plan.
- Reasonable precautions shall include the following in addition to Permit Condition 2.10:
  - Applying dust control at the initial point of material handling, such as the mine working face, to suppress dust throughout the material handling process.
  - Wetting the muck pile before and during loading. If necessary, additional water shall be used to wet the material in the trucks.
  - Prompt processing of stockpiled ore and waste rock so that it will not be allowed to dry and become airborne. Should the material begin to dry and produce dust, water shall be added as a matter of operational management.
  - While operating, the permittee shall observe areas within 100 meters of active mining and mineral processing operations and shall discourage public access to such areas.

- When the facility is operating, the owner or operator shall comply with the requirements in the Fugitive Dust Control Plan at all times.
- The requirements specified in the Fugitive Dust Control Plan shall be incorporated by reference to this permit and shall be enforceable permit conditions.
- A copy of the Fugitive Dust Control Plan shall remain onsite at all times and shall be submitted to the following address within 45 days of permit issuance:

  Air Quality Permit Compliance
  Idaho Falls Regional Office
  Department of Environmental Quality
  900 N. Skyline, Suite B
  Idaho Falls, ID 83402

2.12 Operations and Maintenance Manual

Within 60 days of permit issuance, the permittee shall have developed and submitted to DEQ an Operations and Maintenance (O&M) manual for the baghouses/cartridge filter systems listed in Table 2.1. The O&M manual shall describe the procedures that will be followed to comply with General Provision 2 and the manufacturer specifications for the control devices.

At a minimum, a schedule and procedures for corrective action that will be taken if visible emissions are present from the baghouses/cartridge filter systems at any time shall be included in the O&M manual, including procedures to determine whether bags or cartridges are ruptured, and procedures to determine if bags or cartridges are not appropriately secured in place. The permittee shall operate the baghouses/cartridge filter systems in accordance with the O&M manual.

The permittee shall maintain records of the results of each baghouse/cartridge filter system inspection. The records shall include a description of whether visible emissions were present and if visible emissions were present, a description of the corrective action that was taken. All records shall be maintained on site and in accordance with General Provision 7.

The O&M manual shall be submitted to DEQ within 60 days of permit issuance at the following address and shall contain a certification by a responsible official. Any changes to the O&M manual shall be submitted within 15 days of the change.

Air Quality Permit Compliance
Idaho Falls Regional Office
Department of Environmental Quality
900 N. Skyline, Suite B
Idaho Falls, ID 83402

The operation and monitoring requirements specified in the O&M manual are incorporated by reference to this permit and are enforceable permit conditions.

Monitoring and Recordkeeping Requirements

2.13 Visible Emissions/Opacity Monitoring

Each month that the facility is operated, the permittee shall conduct a site-wide inspection of potential sources of visible emissions; including any stack, vent, or other functionally equivalent opening; during daylight hours and under normal operating conditions, to ensure compliance with Permit Condition 2.3. The inspection shall consist of a see/no see evaluation for each potential source of 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 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.

2.14 Material Throughput Monitoring

The permittee shall monitor and record the annual throughput on a monthly basis to demonstrate compliance with Permit Condition 2.7. Annual throughput shall be determined by summing each monthly throughput total over the previous consecutive 12-calendar month period.

2.15 Odor Complaints

The permittee shall maintain records of all odor complaints received to demonstrate compliance with Permit Condition 2.6. 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.

Performance Testing Requirements

2.16 40 CFR 60, Subpart LL – Initial Performance Test, Recordkeeping and Reporting Requirements

The owner or operator shall conduct a performance test and submit a written report of the results of the test as specified in 40 CFR 60.8(a) and in accordance with 40 CFR 60.385(a). Performance testing shall demonstrate compliance with the emission standards in Permit Condition 2.4.

- Emission sources subject to performance testing shall include the Crushing Building Dust Collector Baghouse Stack and the Concentrator Building Fine Ore Storage Bin Vent.

2.17 40 CFR 60, Subpart LL – Test methods and procedures

- In conducting the performance tests required in Permit Condition 2.16, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.386(a), except as provided in 40 CFR 60.8(b).

- The owner or operator shall determine compliance with the particulate matter standards 40 CFR 60.382 as follows in accordance with 40 CFR 60.386(b):
  - Method 5 or 17 shall be used to determine the particulate matter concentration. The sample volume for each run shall be at least 1.70 dscm (60 dscf). The sampling probe and filter holder of Method 5 may be operated without heaters if the gas stream being sampled is at ambient temperature. For gas streams above ambient temperature, the Method 5 sampling train shall be operated with a probe and filter temperature slightly above the effluent temperature (up to a maximum filter temperature of 121 °C (250 °F)) in order to prevent water condensation on the filter.
  - Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity from stack emissions and process fugitive emissions. The observer shall read opacity only when emissions are clearly identified as emanating solely from the affected facility being observed.

2.18 NSPS 40 CFR 60, Subpart A and Subpart LL – General Provisions

The permittee shall comply with the requirements of 40 CFR 60, Subpart A – General Provisions. The permittee shall follow the procedures relevant to reconstruction in 40 CFR 60.383, in accordance with 40 CFR 60.383. A summary of applicable requirements for affected facilities is provided in Table 2.3.

Table 2.3 NSPS 40 CFR 60, Subpart A – Summary of General Provisions for Owners and Operators of Affected Facilities

Section	Subject	Summary of Section Requirements
60.4	Addresses	• All requests, reports, applications, submittals, and other communications associated with 40 CFR 60, Subpart LL shall be submitted to: Idaho Falls Regional Office Department of Environmental Quality Idaho Falls Regional Office 900 N. Skyline, Suite B Idaho Falls, ID 83402 • All requests, reports, applications, submittals, and other communications associated with 40 CFR 60, Subpart IIII shall be submitted to: Director Air and Waste US EPA 1200 Sixth Avenue Seattle, WA 98101 and Idaho Falls Regional Office Department of Environmental Quality Idaho Falls Regional Office 900 N. Skyline, Suite B Idaho Falls, ID 83402
60.7(a),(b), and (f)	Notification and Recordkeeping	• Notification shall be furnished of commencement of construction postmarked no later than 30 days of such date. • Notification shall be furnished of initial startup postmarked within 15 days of such date. • Notification shall be furnished of any physical or operational change that may increase emissions postmarked 60 days before the change is made. • Records shall be maintained of the occurrence and duration of any startup, shutdown or malfunction; any malfunction of the air pollution control equipment; or any periods during which a CMS or monitoring device is inoperative. • Records shall be maintained, in a permanent form suitable for inspection, of all measurements, performance testing measurements, calibration checks, adjustments and maintenance performed, and other required information. Records shall be maintained for a period of two years following the date of such measurements, maintenance, reports, and records.
60.8	Performance Tests	• At least 30 days prior notice of any performance test shall be provided to afford the opportunity to have an observer to be present. • Within 60 days of achieving the maximum production rate, but not later 180 days after initial startup, performance test(s) shall be conducted and a written report of the results of such test(s) furnished. • Performance testing facilities shall be provided as follows: Sampling ports adequate for test methods applicable to such facility. Safe sampling platform(s). Safe access to sampling platform(s). Utilities for sampling and testing equipment. • Performance tests shall be conducted and data reduced in accordance with 40 CFR 60.8(b), (c), and (f).

Section	Subject	Summary of Section Requirements
60.11(a), (d), (f), and (g)	Compliance with Standards and Maintenance Requirements	• When performance tests are required, compliance with standards is determined by methods and procedures established by 40 CFR 60.8. • At all times, including periods of startup, shutdown, and malfunction, the owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. • For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
60.11(b), (c), and (e)	Compliance with Standards and Maintenance Requirements (Opacity)	• Compliance with opacity standards shall be determined by Method 9 in Appendix A of 40 CFR 60. The permittee may elect to use COM measurements in lieu of Method 9, provided notification is made at least 30 days before the performance test. • The opacity standards shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided. • Opacity observations shall be conducted concurrently with the initial performance test required in 40 CFR 60.8 in accordance with the requirements and exceptions in 40 CFR 60.11(e).
60.12	Circumvention	• No permittee shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard.
60.14	Modification	• A physical or operational change which results in an increase in the emission rate to the atmosphere or any pollutant to which a standard applies shall be considered a modification, and upon modification an existing facility shall become an affected facility in accordance with the requirements and exemptions in 40 CFR 60.14. • Within 180 days of the completion of any physical or operational change, compliance with all applicable standards must be achieved.
60.15	Reconstruction	• An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate in accordance with the requirements of 40 CFR 60.15.

2.19 Incorporation of Federal Requirements by Reference

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 Part 60

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

3. EMERGENCY GENERATOR

3.1 Process Description

The emergency generator is operated to provide backup power in the event of a power outage.

3.2 Emissions Control Description

Table 3.1 EMERGENCY GENERATOR

Emission Units (ID No.)	Emission Control Devices (ID No.)	Emission Points
Emergency Generator (or equivalent[a]) Date of construction: after August 2008 Maximum capacity: 800 kW Maximum operation: 100 hr/yr (non-emergency) Fuel: Diesel Maximum fuel consumption: 57.2 gph Maximum displacement: 2.54 liters/cylinder	None	None Exit height: ≥3 ft Exit diameter: 0.67 ft Exit air flow rate: 5,300 acfm Exit temperature: ≥957 °F

a. "or equivalent" is defined as an emergency generator which has an equivalent or less maximum capacity (kW) and fuel consumption (gph) than listed in this table; which does not result in an increase in emissions; and which does not result in the emission of a toxic air pollutant not previously emitted.

Emissions Limits

3.3 40 CFR 60, Subpart IIII – Emissions Standards for Owners and Operators

- The permittee shall operate and maintain the emergency generator according to the manufacturer's written instructions or procedures that are approved by the engine manufacturer, over the entire life of the engine, in accordance with 40 CFR 60.4206.
- The permittee shall comply with the certification emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power in accordance with 40 CFR 60.4205(b) and 40 CFR 60.4202(a)(2).
  - Exhaust emissions from the emergency generator shall not exceed the exhaust emission standards contained in Table 3.2, in accordance with 40 CFR 89.112.

Table 3.2 EMERGENCY GENERATOR EXHAUST EMISSIONS LIMITS[1]

NMHC+NO_X (g/HP-hr)	CO (g/HP-hr)	PM (g/HP-hr)
4.77	2.61	0.15

1) Table 1 of 40 CFR 89.112, Tier 2 engines greater than 560 kW.

  - Exhaust opacity from the emergency generator shall not exceed 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, in accordance with 40 CFR 89.113. Opacity levels are to be measured and calculated as set forth in 40 CFR part 86, subpart I.

Operating Requirements

3.4 40 CFR 60, Subpart IIII - Fuel Requirements for Owners and Operators

- The permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(a), with a maximum sulfur content of 500 ppm, and a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent, in accordance with 40 CFR 60.4207(a).
- Beginning October 1, 2010, the permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b), with a maximum sulfur content of 15 ppm, and a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent, in accordance with 40 CFR 60.4207(b).

3.5 40 CFR 60, Subpart IIII –Compliance Requirements

- Maintenance checks and readiness testing of the emergency generator is limited to 100 hours per year, in accordance with 40 CFR 60.4211(e). There is no time limit on the use of the emergency generator in emergency situations. The emergency generator may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine.
- Any operation other than emergency operation, maintenance, and testing is prohibited in accordance with 40 CFR 60.4211(e). Anyone may petition EPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year.
- The permittee shall operate and maintain the emergency generator according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer, in accordance with 60.4211(a). In addition, the permittee shall only change those settings that are permitted by the manufacturer.
- The emergency generator purchased by the permittee shall be certified to the applicable emission standard in 40 CFR 60.4205(b) for the same model year and maximum engine power, and shall be installed and configured according to the manufacturer's specifications, in accordance with 40 CFR 60.4211(c).

3.6 40 CFR 60, Subpart IIII – Testing Requirements for Owners and Operators

Owners and operators who conduct performance tests must do so according to the paragraphs of 40 CFR 60.4212 (a) through (d), in accordance with 40 CFR 60.4212.

3.7 40 CFR 60, Subpart IIII – Other Requirements for Owners and Operators

- The permittee shall comply with the deadlines for importing and installing an emergency generator produced in a previous model year, in accordance with 40 CFR60.4208 (a) through (g).
- In accordance with 40 CFR 60.4209(a), the permittee shall install a non-resettable hour meter prior to startup of the emergency generator.

Monitoring and Recordkeeping Requirements

3.8 Fuel Sulfur Content Recordkeeping

The permittee shall maintain documentation of supplier verification of the fuel oil sulfur content on an as-received basis for every shipment, in accordance with General Provision 7 and to demonstrate compliance with Permit Condition 3.4.

3.9 Operating Hours Recordkeeping

The permittee shall record and maintain the operating hours of the emergency generator on a monthly and annual basis to demonstrate compliance with Permit Condition 3.5. Records of this information shall be maintained in accordance with General Provision 7.

3.10 Generator Documentation

The permittee shall maintain up-to-date documentation of any equivalent equipment used in place of the emergency generator listed in Table 3.1 onsite. Documentation shall include information on all of the parameters listed in Table 3.1, including the manufacturer, the model, the maximum capacity, the maximum fuel consumption, the date of manufacture, the date of any reconstruction, and the stack parameters.

Reporting Requirements

3.11 40 CFR 60, Subpart A – General Provisions

The permittee shall comply with the requirements of 40 CFR 60, Subpart A – General Provisions. A summary of applicable requirements for affected facilities is provided in Table 2.3 of Permit Condition 2.18.

3.12 Incorporation of Federal Requirements by Reference

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 Part 60

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

4. PERMIT TO CONSTRUCT GENERAL PROVISIONS

General Compliance

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 and 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.]

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]

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. Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:

   a. Enter upon the permittee's premises where an emissions source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;

   b. Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;

   c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and

   d. As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

Construction and Operation Notification

5. The permittee shall furnish DEQ written notifications as follows in accordance with IDAPA 58.01.01.211:

   a. A notification of the date of initiation of construction, within five working days after occurrence;

   b. A notification of the date of any suspension of construction, if such suspension lasts for one year or more;

c. 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;

d. A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and

e. 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, 5/1/94]

Performance Testing

6. 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.

   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.

   Within 30 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]

Monitoring and Recordkeeping

7. The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Records of monitoring information 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 and 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

8. The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

[IDAPA 58.01.01.130-136, 4/5/00]

Certification

9. 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

10. 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

11. 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

12. 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

13. 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 58.01.01.322.15.h, 5/1/94; 40 CFR 70.6(a)(5)]