

Air Quality

PERMIT TO CONSTRUCT

Permittee Facility Name

Permit Number P-20XX.XXXX

Project ID 00000

Facility ID 000-00000

Facility Location Address/Location, City, Idaho, 83XXX

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 its 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; (g) 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. 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 January XX, 2011

Eric Clark, Permit Writer

Mike Simon, Stationary Source Manager

PERMIT TO CONSTRUCT SCOPE.....3
FACILITY WIDE CONDITIONS4
CONCRETE BATCH PLANT.....12
COMPRESSION IGNITED INTERNAL COMBUSTION ENGINES.....16
NSPS 40 CFR 60, SUBPART III REQUIREMENTS17
NESHAP 40 CFR 63, SUBPART ZZZZ REQUIREMENTS.....19
PERMIT TO CONSTRUCT GENERAL PROVISIONS28

PERMIT TO CONSTRUCT SCOPE

Purpose

1. This permitting action is for issuing a General Concrete Batch Plant.
2. The emission sources regulated by this permit are listed in the following table.

Table 1 REGULATED SOURCES

Source Descriptions	Emission Controls
<p><u>Concrete Batch Plant – Truck or Central Mix</u> Manufacturer: Enter name Model: Enter Model Manufacture Date: Enter Date Maximum capacity: Max cap Maximum production: Enter cy/day and cy/year</p>	<p><u>Cement Storage Silo Baghouse No. 1^a:</u> Manufacturer: Enter name Model: Enter Model</p> <p><u>Cement Supplement Storage Silo Flvash Baghouse No. 2^a:</u> Manufacturer: Enter name Model: Enter Model</p> <p><u>Weigh Batcher Baghouse:</u> Manufacturer: Enter name Model: Enter Model Control Efficiency: 99%</p> <p><u>Truck Load-out Shroud</u> Shroud {or} Shroud with water ring spray {or} Baghouse Note: 95% for shroud only. 99% for other options Control Efficiency: 95% {or} 99%</p> <p><u>Material Transfer Point Water Sprays or Equivalent</u> Note: 75% for typical sprays. 95% for no visible emissions across the property boundary and other suppressants Control Efficiency: 75% {or} 95%</p>
<p><u>Natural Gas or Diesel Engine (or equivalent)^b</u> Maximum Rating: Max rating bhp Construction Date: Enter date EPA Certification: Enter Tier # Note: If the engine is diesel fired add the sulfur content. (0.0015%) ultra-low sulfur diesel.</p>	<p>No control devices <i>Add any control devices if appropriate</i></p>
<p><u>Natural Gas, LPG or Diesel Water heater(s) (or equivalent)^b</u> <i>Remove if no water heater. If multiple heaters add them as well.</i> Maximum Rating: Max rating bhp Maximum Fuel Usage: MMscf/yr {or} gal/yr Note: If the water heater is diesel fired add the sulfur content of 0.0015% ultra-low sulfur diesel.</p>	<p>No control devices <i>Add any control devices if appropriate</i></p>

- a. Both the storage silo baghouse and supplement storage silo flyash baghouse are considered process equipment. Therefore, there is no associated control efficiency. PM₁₀ controlled emission factors were used when determining PTE and for modeling purposes.
- b. “or equivalent” is defined as equipment which has an equivalent or less brake horsepower 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.

FACILITY WIDE CONDITIONS

Fuel Specifications

3. **Allowable Fuels – Water Heater(s)**

{Remove this condition if no heater. Keep appropriate fuels delete others}

The boiler shall combust only the following fuels:

- Natural gas
- Liquid propane gas
- ASTM Grades 1 or 2 distillate fuel oil or a mixture of the two with a maximum sulfur content of 0.0015% by weight

4. **Allowable Fuels – Compression ICEs**

{Remove this condition if no ICE}

The engine(s) shall combust only the following fuels:

- ASTM Grades 1 or 2 distillate fuel oil or a mixture of the two with a maximum sulfur content of 0.0015% by weight and a minimum cetane index of 40 or maximum aromatic content of 35% by volume. The per-gallon standards are derived from 40 CFR 80.510(b) and incorporated by reference into 40 CFR 60.4207(a) and 40 CFR 63.6604.

Fuel Monitoring and Recordkeeping

5. **Allowable Fuel Documentation**

{Remove this condition if no distillate fuel is being used at facility}

For all distillate fuels oil used at this facility, the permittee shall maintain documentation of supplier verification of ASTM Grade, sulfur content, cetane index and aromatic content on an as-received basis for each shipment.

Fugitive Dust Control

6. **Reasonable Control of Fugitive Dust Emissions**

The permittee shall control fugitive emissions generated by operations associated with the CBP plant 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.

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 that might affect the movement of PM. Some of the reasonable precautions include, but are not limited to, the following:

- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.
- Application, where practical, of asphalt, 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, 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.

7. **Fugitive Dust Control – Best Management Practices**

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 plant are observed leaving the facility boundary.
- Visible emissions shall be determined on a see/no see basis.

For the purpose of the following conditions, if any visible fugitive emissions are present at the property boundary from these sources described below, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 visible emissions (VE) test.

- Visible fugitive emissions are greater than 20% from any transfer point. For the purposes of this permit condition, transfer points include, but are not limited to, the following: transfer of sand and aggregate to respective weight bins/hoppers or storage bins/hoppers; transfer of sand and aggregate from respective weight bins/hoppers or storage bins/hoppers to a conveyor; transfer of sand and aggregate from a conveyor to the mixer; and transfer of cement and cement supplement from the storage silo to the mixer.
- Transfer point control strategies for this facility shall include providing manual water spray capability or installing, operating, and maintaining industry specific water spray bars at transfer points, and may also include limiting drop heights such that there is a homogeneous flow of material.
- 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.

{Add the following condition if assuming 95% fugitive control.}

8. **Additional Fugitive Dust Control**

The following actions must be adhered to when an aggregate pile or handling area is not in use:

- Enclose aggregate piles and handling areas with three-sided bunkers.
- Cover aggregate piles and/or apply a dust suppressant.

Fugitive Dust Control Monitoring and Recordkeeping

9. **Fugitive Dust Monitoring**

Each day that the facility is operated, the permittee shall conduct a facility-wide inspection of potential sources of fugitive emissions (e.g., stockpiles, transfer points, etc.) during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each fugitive emissions inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), hours of operation (start & stop) of water, or chemical dust suppressant, application systems, hours of operation of each material handling equipment, certification of data recordkeeping in accordance with general provisions and any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.

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

Opacity

10. **Opacity Limit**

Emissions from any baghouse stack or from any stack, vent, or other functionally equivalent opening associated with the concrete batch plant 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.

Visible Emissions Monitoring and Recordkeeping

11. **Visible Emission/Opacity Monitoring**

Each month that the facility is operated, the permittee shall conduct a facility-wide inspection of potential sources of visible emissions (e.g., baghouses, stack equipment, generator exhaust stacks etc.) during daylight hours and under normal operating conditions. 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:

a) Take appropriate corrective action as expeditiously as practicable to eliminate the visible emissions. Within 24 hours of the initial see/no see evaluation and after the corrective action, the permittee shall conduct a see/no see evaluation of the emissions point in question. If the visible emissions are not eliminated, the permittee shall comply with b).

or

b) Perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. The Method 9 test shall be performed by a certified observer. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20%, as measured using Method 9, 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 emission 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.

Odors

12. **Odors**

In accordance with IDAPA 58.01.01.776.01, 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.

13. **Odor Complaints**

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

Nonattainment Areas

14. **Nonattainment Area Operations**

The permittee shall not relocate and operate any equipment in any nonattainment area. Contact DEQ for current nonattainment area status and more specific details about the nonattainment area boundaries. The geographical locations of nonattainment area in Idaho may be found online at the DEQ website.

Co-location

15. **Co-location Operations**

The emissions sources listed for this CBP shall not collocate with more than one rock crushing plant and shall not locate within 1,000 feet (305 meters) of any other asphalt plant or concrete batch plant.

Reporting Requirements

{Remove this condition if the site-specific modeling was performed}.

16. Relocation Operations

At least 10 days prior to relocation of any equipment covered by this permit, the permittee shall submit a scaled plot plan and a complete Portable Equipment Relocation Form (PERF) in accordance with IDAPA 58.01.01.500, to the following address or fax number:

PERF Processing Unit
DEQ – Air Quality
1410 N. Hilton
Boise, ID 83706-1255
Phone: (208) 373-0502
Fax: (208) 373-0340

The scaled plot plan shall show the location of any emissions source associated with the concrete batch plant, and distances to any area outside of a building where the general public has access, including property boundaries.

Electronic copies of the PERF may be obtained from DEQ's website in both pdf and Word® versions.

40 CFR 60, Subpart A – General Provisions

Only include if the engine(s) is subject to Subpart, IIII

17. The permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A – General Provisions. The summary table below is intended to direct the permittee toward the proper section of the CFR.

Table 2 SUBPART A – GENERAL PROVISIONS

Section	Section Title	Summary of Section Requirements
60.4	Address	<ul style="list-style-type: none"> <u>All requests, reports, applications, submittals, and other communications associated with 40 CFR 60, Subparts A & IIII shall be submitted to:</u> Department of Environmental Quality XXX Regional Office Appropriate Street Address City, ID Zip Code
60.7(a),(b),(c), (d) and (f)	Notification and Record Keeping	<ul style="list-style-type: none"> Notification of commencement of construction postmarked no later than 30 days after such date. Notification of startup postmarked within 15 days of such date. Notification of physical or operational change that may increase emissions postmarked 60 days before the change is made. Maintain records of the occurrence and duration of any: startup, shutdown or malfunction of the affected source; malfunction of air pollution control device; and any period when a monitoring device is inoperative. Maintain in a permanent form records suitable for inspection of all Monitoring and Recordkeeping permit condition requirements, performance testing measurements, operation and maintenance manual, adjustments/maintenance performed and other required information. Records shall be maintained for a period of five years, with the exception of the O & M manual, which shall be updated as needed for the life of the equipment. Records are to be made available to DEQ representatives upon request and within four hours.
60.8	Performance Tests	<ul style="list-style-type: none"> The owner or operator shall provide notice at least 30 days prior to any performance test to afford an opportunity for an observer to be present during testing. Within 60 days of achieving maximum production, but not later than 180 days after startup the permittee shall conduct performance test(s) and furnish a written report of the results of the test(s).
60.11(b), (c), and (e)	Compliance with Standards and Maintenance Requirements (Opacity)	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> No owner or operator shall build, erect, install or use any article or method, including dilution, to conceal an emission which would otherwise constitute a violation.
60.14	Modification	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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.

40 CFR 63, Subpart A – General Provisions

Only include if the engine(s) is subject to Subpart, ZZZZ

18. The permittee shall comply with the applicable requirements of 40 CFR 63, Subpart A – General Provisions. The summary table below is intended to direct the permittee toward the proper section of the CFR.

Table 3 SUBPART A – GENERAL PROVISIONS

Citation	Subject	Explanation
40 CFR 63.1(a)(1)-(12)	General Applicability	
40 CFR 63.1(b)(1)-(3)	Initial Applicability Determination	Applicability of subpart ZZZZ is also specified in 40 CFR 63.6585
40 CFR 63.1(c)(1)	Applicability After Standard Established	
40 CFR 63.1(c)(2)	Applicability of Permit Program for Area Sources	
40 CFR 63.1(c)(5)	Notifications	
40 CFR 63.2	Definitions	Additional definitions are specified in 40 CFR 63.6675.
40 CFR 63.3(a)-(c)	Units and Abbreviations	
40 CFR 63.4(a)(1)-(5)	Prohibited Activities	
40 CFR 63.4(b)-(c)	Circumvention/Fragmentation	
40 CFR 63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability	
40 CFR 63.6(b)(1)-(7)	Compliance Dates for New and Reconstructed Sources	40 CFR 63.6595 specifies the compliance dates.
40 CFR 63.6(c)(1)-(5)	Compliance Dates for Existing Sources	40 CFR 63.6595 specifies the compliance dates.
40 CFR 63.6(f)(2)-(3)	Methods for Determining Compliance	
40 CFR 63.6(g)(1)-(3)	Use of an Alternative Standard	
40 CFR 63.6(i)(1)-(16)	Extension of Compliance	
40 CFR 63.6(j)	Presidential Compliance Exemption	
40 CFR 63.7(a)(1)-(2)	Performance Test Dates	40 CFR 63.6610-6612 specify the performance test dates
40 CFR 63.7(b)(1)-(2)	Notification of Performance Test and Rescheduling	40 CFR 63.6645 specifies the notification
40 CFR 63.7(e)(2)	Conduct Performance Test and reduction of data	40 CFR 63.6620 specifies appropriate test methods
40 CFR 63.7(g)	Performance Test data analysis and recordkeeping and reporting	
40 CFR 63.8	Monitoring Requirements	40 CFR 63.6625 specifies appropriate monitoring requirements
40 CFR 63.9(a)-(e), (g)-(j)	Notification Requirements	40 CFR 63.645 specifies notification requirements.
40 CFR 63.10(a)	Recordkeeping/Reporting—Applicability and General Information	
40 CFR 63.10(b)(1)	General Recordkeeping Requirements	Additional requirements are specified in 40 CFR 63.6655
40 CFR 63.10(b)(2)(xii)	Waiver of recordkeeping requirements	
40 CFR 63.10(b)(2)(xiv)	Records supporting notifications	
40 CFR 63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations	
40 CFR 63.10(d)(1)	General Reporting Requirements	Additional requirements are specified in 40 CFR 63.6650
40 CFR 63.10(d)(4)	Progress Reports for Sources With Compliance Extensions	
40 CFR 63.10(f)	Recordkeeping/Reporting Waiver	
40 CFR 63.12	State Authority and Delegations	
40 CFR 63.13	Addresses of State Air Pollution Control Agencies and EPA Regional Offices	
40 CFR 63.14	Incorporation by Reference	
40 CFR 63.15	Availability of Information/Confidentiality	

Incorporation by Reference

19. 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:

{If one of the following regulations does not apply delete it from the condition.}

- Standards of Performance of New Stationary Sources (NSPS), 40 CFR Part 60, Subpart IIII.
- National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP), 40 CFR Part 63, Subpart ZZZZ

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.

CONCRETE BATCH PLANT

Process Description

20. **Note:** Determine which type of mix truck or central. Update the process description where appropriate.

The facility is a portable **truck mix {or} Central Mix** concrete batch plant consisting of aggregate stockpiles, a cement storage silo, a cement supplement (flyash) storage silo, a weigh batcher, and conveyors. The facility combines aggregate, flyash, and cement and transfers the mixture into either a **truck {or} central drum** along with a measured amount of water for **in-transit {or} stationary mixing** of the concrete. *{Remove following sentence if using truck mix}* When using a Central Mix drum, concrete is transferred to trucks for transport off-site. Power will be supplied to the facility via an **XXX bhp ICE engine(s) {if no engine remove} or line power.**

21. Emission Controls Description

Table 4 CONCRETE BATCH PLANT DESCRIPTION

Emissions Units / Processes	Emission Control Devices
Cement Storage Silo	None ^a
Cement Supplement Storage Silo Flyash	None ^a
Weigh Batcher	Water spray bar around feed boot
Truck/Central Loading	Boot or shroud/Boot with water ring/Baghouse
Material Transfer (Fugitives)	Industry Specific Water sprays or equivalent/No visible emissions across property line
Natural Gas or Diesel Boiler	None
Natural Gas or Diesel Engine	None

a. The baghouses are considered process equipment.

{Edit table as necessary to fit your needs}

Emission Limits

22. **Emissions Limits** of **Natural Gas, LPG, Diesel Fired** Water Heater(s)

The permittee shall not discharge PM to the atmosphere from any fuel-burning equipment source in excess of **0.050 {or} 0.015** gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid as required in IDAPA 58.01.01.676 **{or} 58.01.01.677**. **Note:** If the water heater commenced operation prior to October 1, 1979 use 677 otherwise use 676. Also 0.050 is for diesel and 0.015 is for LPG or natural gas.

Operating Requirements

23. Concrete Production Limits

The concrete production rate shall not exceed the limits set forth in the following table in any one (1) day (cy/day) or consecutive 12-calendar month period (cy/yr). The maximum production limit shall be defined by the setback distance available at a given location.

The setback distance shall be defined as the minimum distance from any center of a silo baghouse stack, truck or central mix loading point, weigh batcher transfer point, or other emission point associated with this concrete batch plant to any area outside of a building where there is public access.

{Select the appropriate daily concrete production and delete the other three columns. Refer to modeling memo for values.}

Table 5 MAXIMUM PRODUCTION RATE/MINIMUM SETBACK DISTANCE

Minimum Setback Distance (IC Engine)	XXX ft	XXX ft	XXX ft	XXX ft
Minimum Setback Distance (Line Power)	XXX ft	XXX ft	XXX ft	XXX ft
Maximum Concrete Production cy/day	500	1,000	1,500	2,500
Maximum Annual Production cy/yr	150,000	150,000	150,000	150,000

24. Hours of Operation

The concrete batch plant and all other associated emissions units may only operate a maximum of **XX daylight** *{may not be daylight hours only. Remove if facility wants to operate at night.}* hours per day

25. Fuel Usage Limit of Water Heater(s)

{Add more heaters if necessary. Refer to spreadsheet for values. Remove any of the fuel options if not used at CBP. Omit this permit condition if no water heater is used at this CBP. If the heater(s) are assumed to operate 8,760 hours and there are no TAPs that exceed the ELs this condition can be deleted.}

The total annual fuel usage of the **XX** MMBtu/hr water heater shall not exceed the following:

- Diesel fuel - **XX** gallons per year
- Natural Gas - **XX** MMscf per year
- LPG – **XX** gallons per year

26. Installation of Baghouse Filter/Cartridge System

The permittee shall install, operate and maintain, at all times, baghouses in accordance with the developed procedures document required in this permit to control PM, PM_{2.5} and PM₁₀ emissions from the concrete batch plant.

27. Installation of Water Spray Bar

The permittee shall install, operate and maintain, at all times, industry specific water sprays (or equivalent) in accordance with the developed procedures document required in this permit to control PM, PM_{2.5} and PM₁₀ emissions from the concrete batch plant.

28. Control System Procedures

Within 60 days of initial start-up, the permittee shall have developed a Control System Procedures document for the inspection and operation of the baghouses/filter system which controls emissions from the baghouses, transfer point boots/enclosures, and the transfer point water sprays. The Control 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 Control System Procedures document shall describe the procedures that will be followed to comply with the maintenance General Provision and shall contain requirements for weekly see-no-see visible emissions inspections of the baghouse. The inspection shall occur during daylight hours and under normal operating conditions.

The Control 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 anytime. 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.
- Air to Cloth Ratio Certification

The Control System Procedures document shall also include a schedule and procedures for corrective action that will be taken if visible emissions are present from the material transfer points at anytime. At a minimum the document shall include:

- Procedures to determine if spray bar is functioning properly; and
- Procedures to determine if water spray bar is appropriate for the application and secured in place.

The Control System Procedures document shall also include, at a minimum, the following methodology used by the facility to handle fugitive dust emissions:

- Use, where practical, of water, or chemical dust suppressant, for control of dust generated as a result of material handling or processing;
- Application of water, or chemical dust suppressant, by hardpiped, conical deluge, or mist, application systems, or equivalent;
- Application and use, where practical and as specified in the application materials, of shrouding of material transfer points;
- Installation and use, where practical, of hoods, fans, and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Containment methods shall be employed during mixing or drop operations;

The permittee shall maintain records of the results of each control system inspections in accordance with Recordkeeping General Provision. 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.

The Control System Procedures document shall be submitted to DEQ within 60 days of permit issuance to remain on file and shall contain a certification by a responsible official. A copy shall also remain on site. Any permittee or DEQ requested changes to the Control System Procedures document shall be submitted within 15 days of the change.

Air Quality Permit Compliance
Department of Environmental Quality
XXX Regional Office
Appropriate Street Address
City, Idaho Zip code

The Control 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 Control System Procedures document are incorporated by reference to this permit and are enforceable permit conditions.

Include one of the two options below if truck mix and assuming 99% loadout control. If no setback distance required, 99 % is assumed. Otherwise add the shroud/boot option. If central mix, omit the following condition.

29. **Truck Loadout Emissions Control**

To assure 99% control truck loadout emissions, one of the following control devices shall be installed, maintained and used at all times during loadout procedures.

a) Install and operate a baghouse in accordance with the developed procedures document in the baghouse system procedures permit condition to control PM and PM₁₀ emissions from truck loadout.

or

b) Install a water ring or equivalent in conjunction with a sealed boot enclosure. The added water shall be included during truck loadout to help suppress excess dust from escaping during the transfer of material to the truck.

{or}

To assure 95% control truck loadout emissions, a shroud/boot enclosure shall be installed, maintained and used at all times during loadout procedures.

Monitoring and Recordkeeping Requirements

30. **Concrete Production Monitoring**

When operating, the permittee shall monitor and record the daily, monthly, and annual concrete production to demonstrate compliance with the concrete production permit condition. Annual production shall be determined by summing each monthly production total over the previous consecutive 12-month period.

31. **Setback Monitoring**

The permittee shall physically measure and record the minimum setback distance from the property boundary line to the closest emissions stack:

- Each time the concrete batch plant is relocated, and
- Any time the facility layout is changed in such a way that the minimum setback distance is reduced compared to previous operations at that location.
- Date Time of measurement and documentation of measurement device was used to determine setback. (include documentation of accuracy of measuring device if applicable).

Information recorded shall include, but not be limited to, a brief description of the nearest distance to any area where the general public has access, and the minimum setback distance in meters or feet to an accuracy of plus or minus 6 feet.

32. **Water Heater Fuel Monitoring**

The permittee shall monitor and record monthly the amount of fuel used in the water heater(s). This should be completed to demonstrate compliance with the water heater fuel usage limit(s). Annual usage shall be determined by calculating the summation of each month over the previous consecutive 12-month period.

Omit this permit condition if there is no water heater(s) associated with the CBP.

33. **Hours of Operation Monitoring**

The permittee shall monitor and record the total number of hours the concrete batch plant operates each day to demonstrate compliance with the hours of operation permit condition.

COMPRESSION IGNITED INTERNAL COMBUSTION ENGINES

Process Description

34. **Process Description**

The facility uses **one, two {or} three** compression ignited internal combustion engines as **a** power sources. **A XXX bhp IC engine(s) is/are** used for general operations when line power is not readily available. **A XXX bhp IC engine** is used as a secondary power source only when necessary. *{Remove the previous sentence if there is engine used as a backup}.*

Operating Requirements

If the engine (>600 bhp) in the application is tier certified add the following condition. If the engine is uncertified delete.

35. **Installation of Certified XXX bhp Engine**

The permittee shall install and operate an EPA Tier **X** Certified engine.

If the engine (≤600 bhp) in the application is tier certified add the following condition. If the engine is uncertified delete.

36. **Installation of Certified XXX bhp Engine**

The permittee shall install and operate an EPA Tier **X** Certified engine.

37. **Operational Hours Limit of Diesel Fired XXX and XXX bhp Engine(s)**

Remove one of the lines below if only one (1) engine is onsite or entire condition if there are no engines. If there is a third engine modify condition accordingly.

The operating hours of the **XX** bhp diesel-fired engine shall not exceed **XX** hours per year. The operating hours of the **XX** bhp diesel-fired engine shall not exceed **XX** hours per year.

Monitoring and Recordkeeping Requirements

38. **Engine Operational Time Monitoring**

The permittee shall record monthly operations in hours of each internal combustion engine. Annual usage shall be determined by calculating the summation of the hours every month over the previous consecutive 12-month period.

NSPS 40 CFR 60, SUBPART IIII REQUIREMENTS

Note: If the engine or engines were constructed, modified or reconstructed after July 11, 2005, they are subject to 40 CFR 60, Subpart IIII. If the engine or engines were both constructed or reconstructed on or prior to July 11, 2005 they are subject to 40 CFR 63, Subpart ZZZZ. Delete the appropriate sections that do not apply. It is possible that both subparts apply. They both would apply if one engine is subject to IIII and the other is subject to ZZZZ.

NSPS Compliance Requirements

{If the engine or engines are subject to 40 CFR 60, Subpart IIII, include the condition, otherwise delete condition.}

39. **Engine Maintenance**

The permittee shall operate and maintain the diesel engine(s) according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer, over the entire life of the engine in accordance with 40 CFR 60.4206. In addition, the permittee may only change those settings that are permitted by the manufacturer.

{Include condition only if engine is subject to Subpart IIII and equipped with a particulate filter.}

40. **Particulate Filter Backpressure Monitor**

The particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high back pressure limit of the engine is approached in accordance with 40 CFR 60.4209(b).

{If the engine or engines are uncertified, greater than 175 bhp and was modified or reconstructed after July 11, 2005, include the following, otherwise delete.}

41. **Recordkeeping Requirements**

All records shall be maintained relating to the following information in accordance with 60.4214(a)(2):

- All notifications submitted to demonstrate compliance and all documentation supporting any notification.
- Maintenance performed on the engine.

{If the engine is not Tier certified, include the following, otherwise delete}

- If the engine used on site is not certified, documentation demonstrating the engine meets the EPA emissions standards.

{If the engine is equipped with a diesel particulate filter, include the following, otherwise delete}

- Records must be kept of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached in accordance with 40 CFR 60.4214(c).

{If the engine is a pre-2007 non-Tier certified engine, include the following condition, otherwise delete.}

42. **Other NSPS Requirements**

Compliance must be demonstrated using one of the following methods in accordance with 40 CFR 60.4211(b).

- The Permittee shall purchase an engine certified according to the requirements of 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
- The Permittee shall maintain records of the IC engine manufacturer's data indicating compliance with the applicable emissions standards.
- The Permittee shall maintain records of the IC engine control device vendor data indicating compliance with the applicable emissions standards.

{If the engine or engines are uncertified, greater than 175 bhp and was modified or reconstructed after July 11, 2005, include the following, otherwise delete.}

43. **Notification Requirements**

An initial notification shall be submitted to DEQ that includes the following information in accordance with 60.4214(a)(1):

- Name and address of the owner or operator
- The physical address of the source
- Engine information including make, model engine family, serial number, model year, maximum engine power, and engine displacement
- Any emissions control equipment and fuel used in the engine(s).

44. **Notification & Reporting Address**

{If the engine or engines are uncertified, greater than 175 bhp and was modified or reconstructed after July 11, 2005, include the following, otherwise delete.}

Any notifications or reporting required by the Standards of Performance of New Stationary Sources (NSPS), 40 CFR Part 60, Subpart IIII or Subpart A – General Provisions shall be submitted to the following address in accordance with 40 CFR 60.7:

Air Quality Permit Compliance
XX Regional Office
Department of Environmental Quality
Appropriate Street Address
XX, ID 83XXX-XXXX
Phone: (208) XXX-XXXX
Fax: (208) XXX-XXXX

NESHAP 40 CFR 63, SUBPART ZZZZ REQUIREMENTS

Note: If the engine or engines were constructed, modified or reconstructed after July 11, 2005, they are subject to 40 CFR 60, Subpart IIII. If the engine or engines were both constructed or reconstructed on or prior to July 11, 2005 they are subject to 40 CFR 63, Subpart ZZZZ. For NESHAP Subpart ZZZZ, if Tier certified IC engines have not been proposed, then NESHAP Subpart ZZZZ applies and NSPS Subpart IIII does not apply. Delete the appropriate sections that do not apply. It is possible that both subparts apply. They both would apply if one engine is subject to IIII and the other is subject to ZZZZ.

{If the IC engines are subject to ZZZZ, include the following Section, otherwise delete it:}

45. Compliance Date for Affected Sources

{Keep only if engine(s) are subject to 40 CFR 63, Subpart ZZZZ, otherwise delete.}

In accordance with 40 CFR 63.6595(a)(1), the affected source must comply with the applicable emission and operating limitations of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ by May 3, 2013.

46. Startup Time Requirements

{If the engine or engines are subject to 40 CFR 63, Subpart ZZZZ, include the condition, otherwise delete condition.}

On and after May 3, 2013, the engine's time spent at idle during startup shall be minimized to a period needed for appropriate and safe loading of the engine, but not to exceed 30 minutes, after which time the emission standards associated with this permit apply in accordance with 40 CFR 63.6625(h).

{If the engine or engines are subject to 40 CFR 63, Subpart ZZZZ and rated at ≤ 300 bhp, include the two following conditions, otherwise delete.}

47. Maintenance Requirements

In accordance with 40 CFR 63.6603(a), on and after May 3, 2013, the following emission limits or operating restrictions are required for the XXX bhp engine(s): *{add both engines bhp if they are each subject to ZZZZ}*. The permittee must meet the following requirements, except during periods of startup.

- Change Oil and filter every 1,000 hours of operation or annually, whichever comes first.
- Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first.
- Inspect hoses and belts every 500 hours of operations or annually, whichever comes first, and replace as necessary

48. Alternative Maintenance Requirements

In accordance with 40 CFR 63.6625(i), on and after May 3, 2013, the permittee has the option of implementing an oil analysis program to extend the specified oil change frequency in the Emissions and Operating Limitations permit condition. The oil analysis must be performed at the same frequency specified for changing the oil. The analysis program must at a minimum analyze the following three parameters:

- Total Base Number, viscosity, and percent water content.

The limits for these parameters are as follows:

- Total Base Number is less than 30% of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20% from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5.

If any of the limits are exceeded, and the IC engine is in operation, the permittee must change the oil within two days of receiving the results of the analysis. If any of the limits are exceeded, and the IC engine is not in operation, the permittee must change the oil within two days or before commencing operation of the IC engine, whichever is later.

The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

49. **Engine(s) Emission Limitations**

{If the engine(s) is rated at 300 bhp to \leq 500 bhp, include the following condition}

In accordance with 40 CFR 63.6603(a), on and after May 3, 2013 for the engine(s) the permittee shall:

- Limit concentration of CO in the exhaust to 49 ppmvd at 15% O₂; or
- Reduce CO emissions in the exhaust by 70% or more.

{If the engine(s) is rated at > 500 bhp, include the following condition}

In accordance with 40 CFR 63.6603, on and after May 3, 2013 for the engine(s) the Permittee shall:

- Limit concentration of CO in the exhaust to 23 ppmvd at 15% O₂; or
- Reduce CO emissions in the exhaust by 70% or more.

{If the engine(s) is rated at > 300 bhp, include the following five conditions}

50. **CO Emission Reduction Compliance**

In accordance with 40 CFR 63.6612, on and after May 3, 2013 for demonstrating compliance with the CO emissions reductions requirement for the engine(s) the permittee shall:

- Measure the O₂ percentage at the inlet and outlet of the control device, using a portable CO and O₂ analyzer, using ASTM D6522–00 (2005). Measurements to determine O₂ percentage must be made at the same time as the measurements for CO concentration.
- Measure the CO concentration at the inlet and the outlet of the control device, using a portable CO and O₂ analyzer, using ASTM D6522–00 (2005) or Method 10 of 40 CFR appendix A. The CO concentration must be at 15% O₂, dry basis.

51. **Formaldehyde or CO Emission Concentration Compliance**

In accordance with 40 CFR 63.6612, on and after May 3, 2013 for demonstrating compliance with the formaldehyde or CO emissions concentration requirements for the engine(s), the Permittee shall:

- Select the sampling port location and the number of traverse points, using Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i). If using a control device, the sampling site must be located at the outlet of the control device.
- Determine the O₂ concentration of the engine exhaust at the sampling port location using Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005). Measurements to determine O₂ concentration must be made at the same time and location as the measurements for formaldehyde concentration.
- Measure moisture content of the engine exhaust at the sampling port location using Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03. Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.

- Measure formaldehyde at the engine exhaust, using Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348–03 (provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130). Formaldehyde concentration must be at 15% O₂, dry basis. Results of this test consist of the average of the three 1-hour, or longer, runs.
- Measure CO concentration at the engine exhaust using Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522–00 (2005)(Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03). CO concentration must be at 15% O₂, dry basis. Results of this test consist of the average of the three 1-hour, or longer, runs.

52. **Engine Performance Testing Requirements**

In accordance with 40 CFR 63.6612 and 63.6615, on and after May 3, 2013 for demonstrating compliance with the emissions limits or reduction in CO or formaldehyde emissions performance testing requirements for the engine(s), the permittee shall:

- Conduct an initial performance tests by November 30, 2013 (180 days after May 13, 2013).
- Conduct three separate test runs for each required performance test. Each test run must last at least 1 hour.
- Submit a Notification of Intent to the Administrator (EPA) to conduct a performance test at least 60 days before the performance test is scheduled.

{If the IC engine is rated at > 500 bhp, include the following bullet point}

- Conduct subsequent performance tests every 8,760 hours of operation or 3 years, whichever comes first.

53. **Engine Performance Emissions Reductions Determination Requirements**

In accordance with 40 CFR 63.6620, on and after May 3, 2013 the permittee shall use Equation 1 to determine compliance with the percent reduction requirement:

- $[(C_i - C_o) \div C_i] \times 100 = R$ (Equation 1)
- Where: C_i = concentration of CO or formaldehyde at the control device inlet, C_o = concentration of CO or formaldehyde at the control device outlet, and R = percent reduction of CO or formaldehyde emissions.

In accordance with 40 CFR 63.6620, on and after May 3, 2013 the Permittee shall normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO₂). If pollutant concentrations are to be corrected to 15 percent oxygen and CO₂ concentration is measured in lieu of oxygen concentration measurement, a CO₂ correction factor is needed. Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

- $F_o = (0.209 \times F_d) \div F_c$ (Equation 2)
- Where: F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO₂ volume produced by the fuel at zero percent excess air, 0.209 = Fraction of air that is oxygen, percent/100, F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm³ /J (dscf/106 Btu), and F_c = Ratio of the volume of CO₂ produced to the gross calorific value of the fuel from Method 19, dsm³ /J (dscf/106 Btu).

In accordance with 40 CFR 63.6620, on and after May 3, 2013 the Permittee shall calculate the CO₂ correction factor for correcting measurement data to 15 percent oxygen, as follows:

- $X_{CO_2} = 5.9 \div F_o$ (Equation 3)

- Where: X_{CO_2} = CO₂ correction factor, percent, $5.9 = 20.9 \text{ percent O}_2 - 15 \text{ percent O}_2$, the defined O₂ correction value, percent.

In accordance with 40 CFR 63.6620, on and after May 3, 2013 the Permittee shall calculate the NO_x and SO₂ gas concentrations adjusted to 15 percent O₂ using CO₂ as follows:

- $C_{adj} = C_d \times (X_{CO_2} \div \%CO_2)$ (Equation 4)
- Where: %CO₂ = Measured CO₂ concentration measured, dry basis, percent.

54. **Engine Performance Tests Administrator Petition Requirements**

In accordance with 40 CFR 63.6620, on and after May 3, 2013 if the permittee complies with the emission limitation to reduce CO and is not using an oxidation catalyst, if the permittee complies with the emission limitation to reduce formaldehyde and is not using NSCR, or if the permittee complies with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and is not using an oxidation catalyst or NSCR, the Permittee shall petition the Administrator (EPA) for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. The Permittee shall not conduct the initial performance test until after the petition has been approved by the Administrator (EPA). The petition shall contain the requirements specified in 40 CFR 63, ZZZZ for Stationary Reciprocating Internal Combustion Engines.

55. **Continuous Emissions Monitoring (CEMS) Requirements**

If the engine or engines are subject to 40 CFR 63, Subpart ZZZZ, include the condition, otherwise delete condition. This condition only applies if the engine(s) is > 500 HP and the permittee elects to use CEMS.

In accordance with 40 CFR 63.6625(a) on and after May 3, 2013 the permittee shall install, operate, and maintain a CEMS according to the following requirements:

- Monitor CO and either O₂ or CO₂ at both the inlet and outlet of the oxidation catalyst.
- Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
- Must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
- The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO₂ concentration.

56. **Continuous Parameter Monitoring System (CPMS) Requirements**

Include this condition only if the engine(s) is > 500 HP and the permittee elects to use CPMS; otherwise delete.

In accordance with 40 CFR 63.6625(b) and 40 CFR 63.6635 on and after May 3, 2013 the permittee shall install, operate, and maintain a CPMS according to the following requirements:

- The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.
- Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee must conduct all monitoring in continuous operation at all times that the unit is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring

failures that are caused in part by poor maintenance or careless operation are not malfunctions.

- For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out of control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. Any 15-minute period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.
- For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.
- The Permittee must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.
- The Permittee must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

In addition, the Permittee shall prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined as follows:

- The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations.
- Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements.
- Equipment performance evaluations, system accuracy audits, or other audit procedures.
- Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1) and (c)(3).
- Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).

57. **Operational Requirements**

{If the engine or engines is rated at ≤ 300 bhp, include the following condition, otherwise delete.}

In accordance with 40 CFR 63.6625 on and after May 3, 2013 the permittee shall operate and maintain the engine(s) and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a specific maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

58. **Crankcase Emission Requirements**

{If the engine or engines are subject to 40 CFR 63, Subpart ZZZZ, include the condition, otherwise delete condition. This condition only applies if the engine(s) is ≥ 300 HP.}

In accordance with 40 CFR 63.6625(g), on and after May 3, 2013, any engine that does not have a closed crankcase ventilation system must install one of the following:

- Closed crankcase ventilation system that prevents crankcase emissions from being emitted into the atmosphere.
- Open crankcase filtration system to reduce crankcase emissions by filtering the exhaust system

The permittee shall follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters. Or the Permittee can request the Administrator (EPA) to approve different maintenance requirements that are as protective as manufacturer requirements.

{If the engine or engines has an oxidation catalyst and is measuring the inlet and outlet temperatures on the catalyst, include the following condition, otherwise delete.}

59. **Temperature Measurement Device Requirements**

In accordance with 40 CFR 63.6625 on and after May 3, 2013 the permittee shall install, operate, and maintain a temperature measurement device for the engine(s) according to the requirements of 40 CFR 63, ZZZZ for Stationary Reciprocating Internal Combustion Engines, as follows:

- Locate the temperature sensor and other necessary equipment in a position that provides a representative temperature.
- Use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 1.0 percent of the temperature value, whichever is larger, for a non-cryogenic temperature range.
- Use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 2.5 percent of the temperature value, whichever is larger, for a cryogenic temperature range.
- Conduct a temperature measurement device calibration check at least every 3 months.

{If the engine or engines has an oxidation catalyst and has a CPMS, include the following condition, otherwise delete.}

60. **Reducing CO Emissions Using an Oxidation Catalyst and Using a CPMS Requirements**

In accordance with 40 CFR 63.6630 on and after May 3, 2013 for the engine(s) the permittee has demonstrated initial compliance with the reduction in CO emissions if:

- *{Using the CO percent reduction requirement, otherwise delete:}* The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and
- *{or Using the CO emissions limitation requirement, otherwise delete:}* The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and
- The permittee has installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
- The permittee has recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.

{If the engine or engines does not have an oxidation catalyst and has a CPMS, include the following condition, otherwise delete.}

61. **Reducing CO Emissions Not Using an Oxidation Catalyst and Using a CPMS Requirements**

In accordance with 40 CFR 63.6630 on and after May 3, 2013 for the engine(s) the permittee has demonstrated initial compliance with the reduction in CO emissions if:

- *{Using the CO percent reduction requirement, otherwise delete:}* The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and
- *{or Using the CO emissions limitation requirement, otherwise delete:}* The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and
- The permittee has installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
- The permittee has recorded the approved operating parameters (if any) during the initial performance test.

{If the Primary IC engine has an oxidation catalyst and has a CEMS, include the following condition, otherwise delete.}

62. **Reducing CO Emissions Using an Oxidation Catalyst and Using a CEMS Requirements**

In accordance with 40 CFR 63.6630 on and after May 3, 2013 for the engine(s) the permittee has demonstrated initial compliance with the reduction in CO emissions if:

- *{Using the CO percent reduction requirement, otherwise delete:}* The Permittee has installed a CEMS to continuously monitor CO and either O₂ or CO₂ at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and
- *{or Using the CO emissions limitation requirement, otherwise delete:}* The Permittee has installed a CEMS to continuously monitor CO and either O₂ or CO₂ at the outlet of the oxidation catalyst according to the requirements in §63.6625(a); and
- The permittee has conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
- The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.

{If the Primary IC engine is rated at > 500 bhp and equipped with an oxidation catalyst, include the following condition, otherwise delete.}

63. **Oxidation Catalyst Maintenance Requirements**

In accordance with 40 CFR 63.6640, on and after May 3, 2013, for an engine that implements the use of an oxidation catalyst to reduce CO emissions, limit the concentration of formaldehyde, or limit the concentration of CO, the Permittee shall ensure the following:

- Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100% load, plus or minus 10% from the pressure drop across the catalyst that was measured during the initial performance test.
- Maintain the temperature of the engine exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. The permittee may petition the EPA for a different temperature range.

{Always include the following condition.}

64. **Notification & Reporting Address**

Any notifications or reporting required by the National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ or Subpart A – General Provisions shall be submitted to the following address in accordance with 40 CFR 63.13:

Air Quality Permit Compliance
XX Regional Office
Department of Environmental Quality
Appropriate Street Address
XX, ID XXXX
Phone: (208) XXX-XXXX
Fax: (208) XXX-XXXX

And

EPA Region 10
Manager, Federal and Delegated Air Programs Unit
Office of Air, Waste, and Toxics
1200 Sixth Avenue, Suite 900
(AWT-107)
Seattle, WA 98101

{If the engine is equipped with a CEMS or a CPMS, include the following condition.}

65. **Reporting Requirements**

In accordance with 40 CFR 63.6650 on and after May 3, 2013 for the engine(s) the permittee shall submit a compliance report:

- If there are no deviations from any emission limitations or operating limitations that apply to the engine(s), a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or
- If the engine(s) had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or
- If the engine(s) had a malfunction during the reporting period, the information in §63.6650(c)(4).

The compliance report shall be submitted:

- Semiannually according to the requirements in §63.6650(b)(1)–(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and
- Annually according to the requirements in §63.6650(b)(6)–(9) for engines that are limited use stationary RICE subject to numerical emission limitations.
- Semiannually according to the requirements in §63.6650(b).
- Semiannually according to the requirements in §63.6650(b).

66. **Recordkeeping Requirements**

In accordance with 40 CFR 63.6655 and 40 CFR 63.6660 on and after May 3, 2013 the permittee shall maintain records for the engine(s) according to the requirements of 40 CFR 63, ZZZZ for Stationary Reciprocating Internal Combustion Engines. The records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1)

- The permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record
- The permittee shall keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

PERMIT TO CONSTRUCT GENERAL PROVISIONS

General Compliance

67. 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.]

68. 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]

69. 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

70. 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 or 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

71. 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]

72. The permittee shall furnish EPA written notifications as follows in accordance with IDAPA 58.01.01.211:

- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;
- A notification of the date of any suspension of construction, if such suspension lasts for one year or more;

- A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date;
- A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and

[IDAPA 58.01.01.211.03, 5/1/94]

Performance Testing

73. 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.
74. 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.
75. 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

76. 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

77. 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

78. 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

79. 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

80. 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

81. 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

82. 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)]