STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

C.L. "Butch" Otter, Governor
Curt Fransen, Director

April 4, 2012

Burl Ackerman
JR Simplot Co.
P.O. Box 1059
Caldwell, ID 83606

RE: Facility ID No. 027-00131, JR Simplot Co., Caldwell
Final Permit Letter

Dear Mr. Ackerman:

The Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) No. P-2011.0141 Project 60966 to JR Simplot Company located at Caldwell for potato processing lines and boilers. This PTC is issued in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho) and is based on the certified information provided in your PTC application received December 6, 2011 and additional information received on March 22, 2012.

This permit is effective immediately and does not release JR Simplot from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances. As described in the permit, this permit will replace the following permits upon a written request for their cancelation:

- PTC No. P-050018, issued December 22, 2005
- PTC No. P-2007.0073, issued September 6, 2007
- PTC No. P-2009.0136, issued January 29, 2010

Pursuant to the Construction and Operation Notification General Provision of your permit, it is required that construction and operation notification be provided. Please provide this information as listed to DEQ's Boise Regional Office, 1445 N. Orchard, Fax (208) 373-0287.

In order to fully understand the compliance requirements of this permit, DEQ highly recommends that you schedule a meeting with Tom Krinke, Air Quality Compliance Officer, at (208) 373-0419 to review and discuss the terms and conditions of this permit. Should you choose to schedule this meeting, DEQ recommends that the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any other staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to contact Dan Pitman at (208) 373-0502 or daniel.pitman@deq.idaho.gov to address any questions or concerns you may have with the enclosed permit.

Sincerely,

Bill Rogers for

Mike Simon
Stationary Source Program Manager
Air Quality Division

MS\DP

Permit No. P-2011.0141 PROJ 60966

Enclosures

Air Quality

PERMIT TO CONSTRUCT

Permittee	***J R Simplot Co. - Caldwell Facility***
Permit Number	***P-2011.0141***
Project ID	***60966***
Facility ID	***027-00131***
Facility Location	***2 Miles West of Caldwell on Highway 19 Caldwell, ID 83606***

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 ***April 4, 2012***

Dan Pitman, P.E., Permit Writer

Mike Simon, Stationary Source Manager

PERMIT SCOPE

Purpose & Scope

1. This is a new permit to construct for 5 new potato processing lines and 3 boilers.
2. This permit allows the construction, commissioning, and operation of 3 new boilers and 5 new potato processing lines when existing potato processing equipment and boilers are brought offline. The permit allows operating some existing potato processing equipment during commissioning of new equipment.
3. This permit will regulate all emission units at the facility once the existing permits that have been issued are canceled as described by this permit.
4. The sources regulated by this permit are listed in Table 1.

Table 1 REGULATED SOURCES

Sources	Control Equipment
Emissions Unit Name: Line 1-4 Dryers Line 1-4 Fryers	RTO (Maximum Heat input 25.2 MMBtu/hr - NG)
Line 5	None
Boiler A Manufacturer: To be determined 98 MMBtu/hr Fuel: Natural Gas	Low NO_x Burner
Boiler B & C Manufacturer: To be determined 98 MMBtu/hr (each) Fuel: Natural Gas & Biogas	Low NO_x Burner Biogas Pretreatment – H2S Removal Device (manufacturer to be determined)
Anaerobic Digester Biogas	Biogas is treated as described above prior to combustion in the boilers. Biogas is untreated when flared.
Generator – Emergency, Warehouse A Manufacturer: Onan 55 hp Fuel: Natural Gas	None
Generator – Emergency, Greenhouse Manufacturer: Olympian 68 hp Fuel: Natural Gas	None
Generator – Emergency, Wastewater Treatment Manufacturer: Onan 166 hp Fuel: Diesel	None
Generator – Emergency, Tech Center Manufacturer: Dayton 14.8 hp Fuel: Natural Gas	None
Fire Water Pump Engine Manufacturer: Cummins 287hp Fuel: Diesel	None

POTATO PROCESSING – NEW PLANT COMMISSIONING

Process Description

5. J.R. Simplot is permitted to operate an existing potato processing plant. During commissioning of the 5 new potato processing lines, 3 new boilers and a new regenerative thermal oxidizer (RTO) the existing potato processing equipment and associated boilers will come off line in stages as new equipment comes online. The existing equipment will operate under the provisions of existing Tier I operating permit No. T1-2011.0117 issued February 13, 2012 until that permit is cancelled as described by this permit. This permit section will regulate facility-wide operations during the commissioning period.

6. **Control Descriptions**

Table 2 NEW EQUIPMENT DESCRIPTION

Sources	Control Equipment
Emissions Unit Name: Line 1-4 Dryers Line 1-4 Fryers	RTO (Maximum NG heat input 25.2 MMBtu/hr)
Line 5	None
Boiler A Manufacturer: To be determined 98 MMBtu/hr Fuel: Natural Gas	Low NO_x Burner
Boiler B & C Manufacturer: To be determined 98 MMBtu/hr (each) Fuel: Natural Gas & Biogas	Low NO_x Burner Biogas Pretreatment – H2S Removal Device (manufacturer to be determined)

Effective Date of Permit Conditions

7. This section of the permit for the *Potato Processing - New Plant Commissioning* is effective when any of the new equipment listed in Table 2 becomes operational and ends when the existing potato processing lines and boilers permanently cease operation and the existing permits have been canceled as detailed in the *Operating Requirements* section.

Operating Requirements

8. During the commissioning period of the new equipment listed in Table 2 the permittee shall comply with all existing permits, all provisions of this permit, and shall:

- Cease operating existing Boiler No. 8.
- Shall operate only one new boiler (Boiler A, B or C).
- Shut down an existing dryer whenever a new dryer is operated. When all existing dryers are shut down all new dryers may be operated.
- Shut down an existing fryer whenever a new fryer is operated. When all existing fryers are shut down all new fryers may be operated.
- Not test the emergency engines at the wastewater area (Unit 1), Tech Center (Unit 3), or Greenhouse (Unit 5). The warehouse generator engine (EG1) and the firewater pump engine Emergency engines shall only be tested for 30 minutes per hour between 11 am and 6 pm. The permittee shall monitor and record the date, time and duration of the operation of each emergency engine.

During the commissioning period the permittee may:

- Operate existing Boiler No.1 as currently permitted.
- Operate the existing natural gas fired air make-up units during the commissioning period.
- Operate the existing biogas flare as currently permitted.
- Operate existing Line 3 (shredded potato line).
- Operate the new shredded potato Line 5.

For the purposes of this permit the commissioning period shall begin when any of the new equipment listed in Table 2 becomes operational and end when the existing potato processing lines and boilers permanently cease operation and the permits to construct for the existing potato processing lines and for the existing boilers have been canceled. In order to cancel the existing permits the Permittee shall request the cancelations in writing. The existing permits are:

- Permit to Construct No. P-050016, issued on December 22, 2005
- Permit to Construct No. P-2007.0073, issued on September 6, 2007
- Permit to Construct No. P-2009.0136 issued January 29, 2010
- Tier I Operating No. T1-2011.0117 issued February 13, 2012

Monitoring and Recordkeeping Requirements

9. Whenever a new dryer or fryer is operational the permittee shall record the operational status of the existing dryers and fryers.

Reporting Requirements

10. The permittee shall notify DEQ in writing within 15 days of operating any of the equipment listed in Table 2. Notification shall include the date of startup and a listing of the equipment that was started.

NEW POTATO PROCESSING LINES

Process Description

11. Raw potatoes are transported to the facility by truck and will be unloaded and stored in an enclosed building. The potatoes are mechanically sorted by size. After sorting the potatoes they will be transported to 5 production lines. Line 1 and Line 4 will process French fries. Line 2 and Line 3 will process preformed potato products. Lines 1 through 4 will include a dryer and a fryer. Line 5 produces frozen shredded potatoes that are not dried or fried. Each line will include peeling, sorting, grading, blanching, freezing and packaging processes.

12. **Control Description**

Table 4 POTATO PROCESSING LINES 1-5 DESCRIPTION

Sources	Control Equipment
Emissions Unit Name: Line 1-4 Dryers Line 1-4 Fryers	RTO (Maximum NG heat input 25.2 MMBtu/hr)
Line 5	None

Effective Date of Permit Conditions

13. This section of the permit for *New Potato Processing Lines* is effective upon the date of issuance of this permit.

Emission Limits

14. **Emission Limits**

The emissions from the RTO stack shall not exceed any emissions rate limit in the following table.

Table 5 RTO EMISSION LIMITS [a]

Emission Unit	$PM_{2.5}$ [b] (lb/hr) [c]	NO_x (lb/hr) [c]
RTO Stack	6.7	2.5

a) In absence of any other credible evidence, compliance is assured by complying with permit operating, monitoring, and recordkeeping requirements.
b) Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers, including condensable particulate.
c) Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.

Operating Requirements

15. Emissions from Line1, 2, 3 and 4 dryers and fryers shall be ducted to the RTO. The RTO stack height shall be at least 85 feet from ground elevation.

16. Final potato product weight, including whatever moisture is present, shall not exceed:

- 1320 tons per calendar day from Line 1 and Line 4 combined.
- 264 tons per calendar day from Line 2 and Line 3 combined.

17. The RTO furnace shall be equipped with a continuous temperature monitoring and recording device. The temperature monitoring device shall be installed, maintained and calibrated in accordance with manufacturer specifications.

18. The RTO furnace shall be maintained at a temperature greater than or equal to 1,550 degrees Fahrenheit whenever Line1, Line 2, Line 3, or Line 4 is operating.

Monitoring and Recordkeeping Requirements

19. The permittee shall monitor and record the final potato product weight in tons per calendar day from Line 1, Line 2, Line 3 and Line 4.

20. The RTO furnace operating temperature shall be recorded at least once each 15 minutes.

21. Within 180 days of startup of the RTO the permittee shall conduct performance tests to demonstrate compliance with the NO_x and $PM_{2.5}$ emission limits. The permittee is encouraged to submit a source testing protocol for approval 30 days prior to conducting the performance test.

    The permittee shall test in accordance with IDAPA 58.01.01.157, the conditions of this permit including the operating requirements for Lines 1, 2, 3 & 4 and comply with the notification requirements, testing procedures and reporting requirements included in the General Provisions of this permit.

    The permittee shall monitor and record the temperature of the RTO furnace at least once each 15 minutes during the performance test.

    The source tests shall be conducted under "worst case normal" conditions as required by IDAPA 58.01.01.157 and the source test report shall contain documentation that the test was conducted under these conditions.

    After the initial performance test, future testing shall be performed according to the following schedule. If the emission rate measured in the most recent test is less than or equal to 75% of the NO_x or $PM_{2.5}$ emission standard, the next test shall for the pollutant shall be conducted within five years of the test date. If the emission rate measured during the most recent performance test is greater than 75%, but less than or equal to 90%, of the NOx or $PM_{2.5}$ emission standard, the next test for that pollutant shall be conducted within two years of the test date. If the NOx or $PM_{2.5}$ emission rate measured during the most recent performance test is greater than 90% the next test for that pollutant shall be conducted within one year of the test date.

NEW BOILERS

Process Description

22. Steam will be provided to the potato processing lines by 3 new boilers. Boiler A will be fired exclusively with natural gas. Boilers B and C will be fired with natural gas and/or biogas from the wastewater treatment systems anaerobic digester.

23. **Control Description**

Table 6 BOILER DESCRIPTION

Sources	Control Equipment
Boiler A Manufacturer: To be determined Input Capacity: 98.0 MMBtu/hr Fuel: Natural Gas	Low NO_x Burner
Boiler B & C Manufacturer: To be determined Input Capacity: 98.0 MMBtu/hr (each) Fuel: Natural Gas & Biogas	Low NO_x Burner

Effective Date of Permit Conditions

24. This section of the permit for *New Boilers* is effective upon the date of commencement of operation of any of the new boilers.

Emission Limits

25. The emissions from each boiler stack shall not exceed any emissions rate limit in the following table.

Table 7 BOILER EMISSION LIMITS [a]

Emission Units	CO [b] (lb/hr) [c]	NO_x (lb/hr) [c]
Boiler A, B & C (each)	5.0	1.8

a) In absence of any other credible evidence, compliance is assured by complying with permit operating, monitoring, and recordkeeping requirements.
b) Carbon monoxide.
c) Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.

26. Sulfur dioxide emissions from Boiler B and Boiler C combined shall not exceed 0.7 pounds per hour.

Operating Requirements

27. Boiler A, B and C shall not have rated input capacities greater than 98.0 MMBtu/hr for each boiler.

28. Boiler A shall be fueled by natural gas exclusively. Boiler B and C shall be fueled by natural gas and/or biogas from the wastewater treatment plant's anaerobic digester.

Monitoring and Recordkeeping Requirements

29. Biogas Flow Rate Monitoring

The permittee shall install and operate a biogas flow meter in order to determine the total quantity of biogas combusted by the boilers each hour. The biogas flow meter shall:

- Installed in accordance with manufacturer specifications.
- Be rated with an accuracy of plus or minus 5% of the total gas flow rate that is being monitored.

- Be calibrated in accordance with manufacturer specifications.
- Installed downstream of the biogas treatment system.

A copy of the manufacturer calibration and installation specifications shall be made available to Department representatives upon request.

30. Sulfur Dioxide Monitoring

30.1 Once each 8 hours the permittee shall calculate and record sulfur dioxide emissions in pounds per hour from Boiler B and from Boiler C when biogas is combusted in the boilers. Daily monitoring may be conducted in lieu of 8 hour monitoring, provided that 12 consecutive weeks of monitoring each 8 hours show that the measured sulfur dioxide emission rate does not equal or exceed 90% of the combined pound per hour limit. If any measured sulfur dioxide emission rate during daily monitoring equals or exceeds 90% of the sulfur dioxide pound per hour emission limit, then the monitoring frequency shall revert to once each 8 hours until 12 consecutive weeks of monitoring do not equal or exceed 90% of the limit. Records of this information shall be maintained on site and be made available to DEQ representatives upon request and in accordance with the Recordkeeping General Provision. Monitoring shall occur in accordance with a written and DEQ approved monitoring protocol within 60 days of startup.

30.2 The permittee may use a hydrogen sulfide CEM on the biogas pipeline, a sulfur dioxide CEM(s) on the boilers stacks, a hand held hydrogen sulfide monitor on the biogas pipeline, an inline hydrogen sulfide monitor on the biogas pipeline, or a DEQ approved alternative such as laboratory analysis to determine an hourly sulfur dioxide emission rate. The permittee shall presume all hydrogen sulfide is oxidized in the boiler to sulfur dioxide.

30.3 If the permittee elects to use a hydrogen sulfide CEM on the biogas pipeline, an inline hydrogen sulfide monitor on the biogas pipeline, or a sulfur dioxide CEM on the boilers stacks monitoring shall occur in accordance with a written and DEQ approved monitoring protocol. The monitoring protocol shall address:

- Installation specifications
- Calibration requirements (i.e. zero and span checks)
- Technical details of how the combined sulfur dioxide pound per hour emissions will be calculated from the CEM data and biogas flow data.

30.4 If the permittee elects to use a hand held hydrogen sulfide monitor the device shall have a certified accuracy of plus or minus 5% and the hand held monitor shall be calibrated, maintained, and replaced in accordance with manufacturer specifications. The permittee shall maintain documentation on-site of the manufacturer's specifications for the hand held monitor including documentation of the accuracy of the device, calibration, and replacement requirements. Sulfur dioxide emission rate monitoring shall occur in accordance with a written and DEQ approved monitoring protocol. The monitoring protocol shall address:

- Monitoring procedures including details regarding monitoring ports, and sampling procedures
- Calibration requirements
- Technical details of how the combined sulfur dioxide pound per hour emissions will be calculated from the hand held hydrogen sulfide monitoring data and biogas flow data.

31. Within 180 days of startup either Boiler A, B and C the permittee shall conduct performance tests on one of these boilers to demonstrate compliance with the NO_x and CO emission limits. Within two years after the initial test the permittee shall test a different boiler than was initially tested. Within two years of the most recent test the remaining untested boiler shall be tested. This schedule shall be repeated (a different boiler tested every two years) until a boiler has two consecutive tests (that are up to 6 years apart) which demonstrate that emissions are equal to or less than 80% of the NO_x and CO standards.

If two consecutive tests show that a boiler is less than 80% of the NO_x and CO standards the permittee may stop testing that boiler. The schedule for testing the remaining boiler(s) shall be on a two year rotating basis until two consecutive tests on a boiler are less than 80% of the both the NO_x and CO standards. If one boiler remains to be tested it shall be tested each two years until two consecutive tests are less than 80% of the NO_x and CO standards. The permittee is encouraged to submit a source testing protocol for approval 30 days prior to conducting the performance test.

The permittee shall test in accordance with IDAPA 58.01.01.157, and comply with the notification requirements, testing procedures and reporting requirements included in the General Provisions of this permit.

The source tests shall be conducted under "worst case normal" conditions as required by IDAPA 58.01.01.157 and the source test report shall contain documentation that the test was conducted under these conditions.

32. The permittee shall monitor and maintain records of the amount of natural gas and biogas combusted in each boiler each day in accordance with 40 CFR 60.48c(g)(1), or the permittee may elect to record and maintain records of the amount of fuel combusted during each calendar month in accordance with 40 CFR 60.48c(g)(2); or to record and maintain records of the total amount of gas delivered to that property during each calendar month in accordance with 40 CFR 60.48c(g)(3).

Reporting Requirements

33. The permittee shall comply with all applicable notification requirements of 40 CFR 60.48c(a) and 40 CFR 60.7, including:

- Notification of the date of construction and the heat input capacity of the affected units, no later than 30 days after such date.
- Notification of the actual date of initial startup
- Notification of any physical and operational changes which may increase emissions, unless that change is specifically exempted by 40 CFR Subpart Dc or by 40 CFR 60.14(e). The notification shall be postmarked 60 days before the change is made, or as soon as reasonably practicable. The notification shall include: the precise nature of the change, present and proposed emission control systems, productive capacity before and after the change, and the expected completion date of the change.

Notifications should be submitted the following address:

Department of Environmental Quality
Boise Regional Office
Attn: Air – NSPS Reporting
1445 N. Orchard
Boise, ID 83706

Phone: (208) 373-0550
Fax: (208) 373-0287

NATURAL GAS USAGE/GREENHOUSE GAS EMISSION LIMITATION

Process Description

34. Natural gas is combusted in several emissions units at the facility including but not limited to boilers, engines, and RTO.

Effective Date of Permit Conditions

35. This section of the permit for *Natural Gas Usage* is effective upon the date of issuance of this permit.

Operating Requirements

36. Facility-wide natural gas usage shall not exceed 1,646 million standard cubic feet per any consecutive 12 calendar month period.

Monitoring and Recordkeeping Requirements

37. The permittee shall monitor facility-wide natural gas usage each calendar month and record the cubic feet of natural gas consumed during the previous consecutive 12 calendar months.

BIOGAS UNIT

Process Description

38. Gases produced by the ADI-BVF anaerobic digester at the wastewater treatment facility are referred to as biogases. The biogas primarily consists of methane, carbon dioxide, and hydrogen sulfide (H_2S). These gases are collected and routed to a waste flare (Unit No. S-C-BF) equipped with a natural gas-fired pilot light. The flare combusts the biogas to form carbon dioxide, sulfur dioxide, and water, which are vented to the atmosphere. The biogas can also be burned in Boiler B and C.

39. **Control Descriptions**

Table 8 ANAEROBIC DIGESTER DESCRIPTION

Sources	Control Equipment
Anaerobic digester	Flare, or scrubber and boiler

Effective Date of Permit Conditions

40. This section of the permit for the *Biogas Unit* becomes effective upon cancelation of Permit to Construct No. P-2009.0136 issued January 29, 2010. In order to cancel the existing permit the Permittee shall request the cancelation in writing.

Emission Limits

41. The total SO_2 emissions from the combustion of biogas from the ADI-BVF digester flare shall not exceed:

- 28.8 pounds per hour;
- 90 tons per any consecutive 12-month period.

42. In accordance with IDAPA 58.01.01.775-776 the permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution

Operating Requirements

43. All biogas generated from the anaerobic digester shall be combusted in a flare or boiler.

44. The flame shall be present at the flare at all times that biogas is diverted to the flare.

45. The permittee shall maintain an O&M manual for the ADI-BVF digester flare that describes the procedures that will be followed to comply with the general provision regarding maintenance and efficient operation of the control equipment and the manufacturer specifications for the air pollution control device. This manual shall remain onsite at all times and shall be made available to DEQ representatives upon request.

Monitoring and Recordkeeping Requirements

46. The permittee shall install, calibrate, maintain, and operate flow meter(s) to measure the biogas being combusted at the flare. If the flow rate to the flare is not monitored directly the permittee may operate a biogas flow meter to measure to total flow from the digester and a flow meter to measure the flow rate to the boiler. The flow rate to the flare may be determined as the difference of the total flow from the digester and the flow to the boiler provided the biogas from the digester is only routed to the boiler and the flare. The biogas flow rate to the flare shall be continuously monitored, either directly or indirectly, and the amount combusted each hour and each consecutive 12 calendar months shall be recorded.

The biogas flow meter(s) shall be:

- Installed in accordance with manufacturer's specifications.

- Rated with an accuracy of plus or minus 5% of the total gas flow rate that is being monitored.
- Calibrated in accordance with manufacturer specifications.

A copy of the manufacturer calibration and installation specifications shall be made available to Department representatives upon request.

47. Sulfur Dioxide Monitoring

47.1 Once each 8 hours the permittee shall calculate and record sulfur dioxide emissions in pounds per hour from the flare when biogas is combusted in the flare. Daily monitoring may be conducted in lieu of 8 hour monitoring, provided that 12 consecutive weeks of monitoring each 8 hours show that the measured sulfur dioxide emission rate does not equal or exceed 90% of the combined pound per hour limit. If any measured sulfur dioxide emission rate during daily monitoring equals or exceeds 90% of the sulfur dioxide pound per hour emission limit, then the monitoring frequency shall revert to once each 8 hours until 12 consecutive weeks of monitoring do not equal or exceed 90% of the limit. Records of this information shall be maintained on site and be made available to DEQ representatives upon request and in accordance with the Recordkeeping General Provision. Monitoring shall occur in accordance with a written and DEQ approved monitoring protocol within 60 days of startup.

47.2 Each month the permittee shall calculate the tons of sulfur dioxide emitted during the previous consecutive 12 months.

47.3 The permittee shall use a hydrogen sulfide CEM, a hand held hydrogen sulfide monitor, or an inline hydrogen sulfide monitor on the biogas pipeline to determine an hourly sulfur dioxide emission rate, or use a DEQ approved alternative such as laboratory analysis. The permittee shall presume all hydrogen sulfide is oxidized in the flare to sulfur dioxide.

47.4 If the permittee elects to use a hydrogen sulfide CEM or an inline hydrogen sulfide monitor on the biogas pipeline, monitoring shall occur in accordance with a written and DEQ approved monitoring protocol. The monitoring protocol shall address:

- Installation specifications
- Calibration requirements (i.e. zero and span checks)
- Technical details of how the sulfur dioxide pound per hour emissions rate will be calculated and how the tons of sulfur dioxide emitted during the precious consecutive 12 calendar months will be calculated from the CEM data and biogas flow data.

47.5 If the permittee elects to use a hand held hydrogen sulfide monitor the device shall have a certified accuracy of plus or minus 5% and the hand held monitor shall be calibrated, maintained, and replaced in accordance with manufacturer specifications. The permittee shall maintain documentation on-site the manufacturer's specifications for the hand held monitor including documentation of the accuracy of the device, calibration and replacement requirements. Sulfur dioxide emission rate monitoring shall occur in accordance with a written and DEQ approved monitoring protocol. The monitoring protocol shall address:

- Monitoring procedures including details regarding monitoring ports, and sampling procedures
- Calibration requirements
- Technical details of how the sulfur dioxide pound per hour emissions rate will be calculated and how the tons of sulfur dioxide emitted during the precious consecutive 12 calendar months will be calculated from the CEM data and biogas flow data.

48. The permittee shall calibrate, maintain, and operate, in accordance with manufacturer specifications, a thermocouple or other equivalent device which detects the presence of the flame at the flare. When a flame is not present, the following information shall be recorded in a log: 1) the date(s) that the flame was not present, 2) the duration time the flame was not present, and 3) the reason the flame was not present.

EMERGENCY IC ENGINES

Process Description

49. The permittee will utilize 5 engines to provide power during emergency situations.

Table 9 EMERGENCY ENGINES AND EMISSIONS CONTROL DEVICES

Emissions Unit / Process	Emissions Control Device
Unit 1: 166 hp diesel CI engine installed prior to June 12, 2006 (EG3 at Waste Plant)	None
Unit 2: 287 hp diesel CI engine installed prior to June 12, 2006 (FWP1 – Firewater pump)	None
Unit 3: 14.8 hp natural gas SI engine installed prior to June 12, 2006 (EG4 at the Tech Center)	None
Unit 4: 55 hp natural gas SI engine installed prior to June 12, 2006 (EG1 at the Warehouse)	None
Unit 5: 68 hp natural gas SI engine installed prior to June 12, 2006 (EG2 at the Greenhouse)	None

The permittee shall comply will all applicable requirements of 40 CFR 63, Subpart ZZZZ and all applicable general provisions of 40 CFR 63 Subpart A.

Subpart ZZZZ applies to the existing Reciprocating Internal Combustion Engines (RICE), Units 1, 2, and 4, located at an area source of HAP emissions.

Effective Date of Permit Conditions

50. This section of the permit for the *Emergency IC Engines* becomes effective upon cancelation of Tier I Operating Permit No. T1-2011.0117 issued February 13, 2012. In order to cancel the existing permit the Permittee shall request the cancelation in writing.

Compliance Date

51. In accordance with 40 CFR 63.6595(a)(1), Units 1 and 2 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.

52. In accordance with 40 CFR 63.6595(a)(1), Unit 3, 4 and 5 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 October 19, 2013.

Permit Limits/Standard Summary

53. 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 stationary emergency CI RICE, Units 1 and 2. The permittee must meet the following requirements, except during periods of startup.

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

54. In accordance with 40 CFR 63.6603(a), on and after October 19, 2013, the following emission limits or operating restrictions are required for the stationary emergency SI RICE, Unit 3, 4 and 5. The permittee must meet the following requirements, except during periods of startup.

- Change oil and filter every 500 hours of operation or annually, whichever comes first.

- Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first.
- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Operating Requirements

55. All emergency engines testing shall comply with the following:

    - All engines (Units 1-5) shall only operate between the hours of 11 am and 6 pm; and
    - Units 1, 3, 4 and 5 shall only operate 30 minutes per hour.

56. In accordance with 40 CFR 63.6605, the permittee shall, at all times, operate and maintain the Units 1, 2, 3, 4 and 5, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

Monitoring and Recordkeeping Requirements

57. The permittee shall monitor and record the date, time and duration of the operation of each emergency engine (Units 1- 5) during maintenance checks and readiness testing.

58. In accordance with 40 CFR 63.6625(e)(3), the permittee must operate and maintain Units 1, 2, 3, 4 and 5, and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a 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.

59. In accordance with 63.6625(f), Units 1, 2, 3, 4 and 5, which are located at an area source of HAP emissions must install a non-resettable hour meter if one is not already installed.

60. In accordance with 40 CFR 63.6625(h), Units 1, 2, 3, 4 and 5, 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 applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.

61. In accordance with 40 CFR 63.6625(i), the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in the Permit Limits/Standard Summary permit condition for Units 1 and 2. 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 condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the stationary emergency RICE owner or operator is not required to change the oil. If any of the limits are exceeded, the stationary emergency RICE owner or operator must change the oil within 2 days of receiving the results of the analysis; if the stationary emergency RICE is not in operation when the results of the analysis are received, the stationary emergency RICE owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator 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 stationary emergency RICE. The analysis program must be part of the maintenance plan for the stationary emergency RICE.

62. In accordance with 40 CFR 63.6625(j), the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in the Permit Limits/Standard Summary permit condition for Unit 3, 4 and 5. 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 Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the stationary emergency RICE owner or operator is not required to change the oil. If any of the limits are exceeded, the stationary emergency RICE owner or operator must change the oil within 2 days of receiving the results of the analysis; if the stationary emergency RICE is not in operation when the results of the analysis are received, the stationary emergency RICE owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator 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 stationary emergency RICE. The analysis program must be part of the maintenance plan for the stationary emergency RICE.

63. In accordance with 40 CFR 63.6640(f), the permittee must operate Units 1, 2, 3, 4 and 5 according to the requirements in paragraphs (f)(1)(i) through (iii). The paragraphs are as follows:

    1. There is no time limit on the use of emergency stationary RICE in emergency situations.

    2. The permittee may operate the stationary emergency RICE for the purposes of maintenance checks and readiness testing, provided the tests are recommended by Federal, State or local government, the manufacturer, the vendor or the insurance company associated with the stationary emergency RICE. Maintenance checks and readiness testing of such units is limited to 100 hours per year.

    3. The permittee may operate the emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hour per year provided for maintenance and testing.

64. In accordance with 40 CFR 63.6655(e), the permittee must keep records of the maintenance conducted on Units 1, 2, 3, 4 and 5 in order to demonstrate that the permittee operated and maintained Units 1, 2, 3, 4 and 5 and after-treatment control device (if any) according to the maintenance plan if the permittee owns or operates any of the following RICE; (1) an existing stationary emergency RICE, (2) an existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

    In accordance with 40 CFR 63.6655(f), an existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, the permittee must keep records of the hours of operation of the stationary emergency RICE that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If engines are used for demand response, the permittee must keep records of the notification of the emergency situation, and the time the stationary emergency RICE was operated as part of demand response.

    All records shall be readily accessible in hard copy or electronic form for a minimum of five (5) years after the date of each occurrence, measurement, maintenance procedure, corrective action or report in accordance with 40 CFR 63.6660.

65. Any notifications or reporting required by 40 CFR 63, Subpart ZZZZ or Subpart A – General Provisions shall be submitted to the following addresses:

Air Quality Permit Compliance
Boise Regional Office
Department of Environmental Quality
1445 N. Orchard
Boise, ID 83706
Phone: (208) 373-0550
Fax: (208) 373-0287

and

EPA Region 10
Air Operating Permits, OAQ-107
1200 Sixth Ave.
Seattle, WA 98101

66. Should there be conflict between permit conditions that reference CFR provisions and the CFR, the CFR shall govern including any amendments to the CFR.

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:

    i. 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;

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

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

    iv. 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

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 DEQ written notifications as follows in accordance with IDAPA 58.01.01.211:

    i. 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;

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

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

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

[IDAPA 58.01.01.211.03, 5/1/94]

Performance Testing

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, at its option, may 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 60 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00]

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 58.01.01.211, 5/1/94]