

Statement of Basis

Tier I Operating Permit No. T1-2014.0034

Project ID 61419

Idaho Power Company Evander Andrews Complex

Mountain Home, Idaho

Facility ID 039-00024

Final

April 02, 2015

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Permit Writer

The purpose of this Statement of Basis is to set forth the legal and factual basis for the Tier I operating permit terms and conditions, including references to the applicable statutory or regulatory provisions for the terms and conditions, as required by IDAPA 58.01.01.362

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1. ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

acfm	actual cubic feet per minute
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BMP	best management practices
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	continuous emission monitoring systems
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CI	compression ignition
CMS	continuous monitoring systems
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	CO ₂ equivalent emissions
COMS	continuous opacity monitoring systems
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EPA	U.S. Environmental Protection Agency
GHG	greenhouse gases
gph	gallons per hour
gpm	gallons per minute
gr	grains (1 lb = 7,000 grains)
HAP	hazardous air pollutants
HHV	higher heating value
hp	horsepower
hr/yr	hours per consecutive 12 calendar month period
ICE	internal combustion engines
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
iwg	inches of water gauge
km	kilometers
lb/hr	pounds per hour
m	meters
MACT	Maximum Achievable Control Technology
mg/dscm	milligrams per dry standard cubic meter
MMBtu	million British thermal units
MMscf	million standard cubic feet
MRRR	Monitoring, Recordkeeping and Reporting Requirements
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
O&M	operation and maintenance
O ₂	oxygen
PC	permit condition
PM	particulate matter
PM _{2.5}	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers

PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppm	parts per million
ppmw	parts per million by weight
PSD	Prevention of Significant Deterioration
psig	pounds per square inch gauge
PTC	permit to construct
PTE	potential to emit
PW	process weight rate
RICE	reciprocating internal combustion engines
<i>Rules</i>	<i>Rules for the Control of Air Pollution in Idaho</i>
scf	standard cubic feet
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SO _x	sulfur oxides
T/day	tons per calendar day
T/hr	tons per hour
T/yr	tons per consecutive 12 calendar month period
T1	Tier I operating permit
T2	Tier II operating permit
TAP	toxic air pollutants
T-RACT	Toxic Air Pollutant Reasonably Available Control Technology
ULSD	ultra low sulfur diesel
U.S.C.	United States Code
VOC	volatile organic compound

2. INTRODUCTION AND APPLICABILITY

Idaho Power Company (Idaho Power) operates the Evander Andrews Complex near Mountain Home, Idaho. The facility is classified as a major facility, as defined by IDAPA 58.01.01.008.10.c, because it emits or has the potential to emit CO and NO_x above the major source threshold of 100 tons-per-year. At the time of this permitting action, the facility is not a major source of HAP emissions. As a major facility, Idaho Power is required to apply for a Tier I operating permit pursuant to IDAPA 58.01.01.301. The application for a Tier I operating permit renewal must contain a certification from Idaho Power as to its compliance status with all applicable requirements (IDAPA 58.01.01.314.09).

IDAPA 58.01.01.362 requires that as part of its review of the Tier I application, DEQ shall prepare a technical memorandum (i.e. statement of basis) that sets forth the legal and factual basis for the draft Tier I operating permit terms and conditions including reference to the applicable statutory provisions or the draft denial. This document provides the basis for the draft Tier I operating permit for Idaho Power.

The format of this Statement of Basis follows that of the permit with the exception of the facility's information discussed first followed by the scope, the applicable requirements and permit shield, and finally the general provisions.

Idaho Power's Tier I operating permit is organized into sections. They are as follows:

Section 2 - Tier I Operating Permit Scope

The scope describes this permitting action.

Section 3 - Facility-Wide Conditions

The Facility-wide Conditions section contains the applicable requirements (permit conditions) that apply facility-wide. Where required, monitoring, recordkeeping and reporting requirements sufficient to assure compliance with each permit condition follows the permit condition.

Sections 3 through 7 – Combustion Turbines CT1, CT2, and CT3, Fuel Heaters H1 and H2, Emergency Fire Pump and Emergency Electrical Generator

The emissions unit-specific sections of the permit contain the applicable requirements that specially apply to each regulated emissions unit. Some requirements that apply to an emissions unit (e.g. opacity limits) may be contained in the facility-wide conditions. As with the facility-wide conditions, monitoring, recordkeeping and reporting requirements sufficient to assure compliance with each applicable requirement immediately follows the applicable requirement.

Section 8 - Non-applicable Requirements and Insignificant Activities

This section lists those requirements that the applicant has requested as non-applicable, and DEQ proposes to grant a permit shield in accordance with IDAPA 58.01.01.325.

If requested by the applicant, this section also lists emissions units and activities determined to be insignificant activities based on size or production as allowed by IDAPA 58.01.01.317.01.b.

Section 9 – Title IV Acid Rain Permit for Combustion Turbines CT1, CT2, and CT3

This section of the permit in accordance with IDAPA 58.01.01, Rules for the Control of Air Pollution in Idaho, and Titles IV and V of the Clean Air Act, DEQ issues this permit for CT1, CT2, and CT3 pursuant to IDAPA 58.01.01.300. Where DEQ has provided a reprint of an applicable regulation, in the case of any discrepancy or conflict between the reprint and the CFR, the requirement in the CFR shall control.

Section 10 - General Provisions

The final section of the permit contains standard terms and conditions that apply to all major facilities subject to IDAPA 58.01.01.300. This section is the same for all Tier I sources. These conditions have been reviewed by EPA and contain all terms required by IDAPA 58.01.01 et al as well as requirements from other air quality laws and regulations. Each general provision has been paraphrased so it is more easily understood by the general public; however, there is no intent to alter the effect of the requirement. Should there be a discrepancy between a paraphrased general provision in this statement of basis and the rule or permit, the rule or permit shall govern.

3. FACILITY INFORMATION

3.1 Facility Description

The Idaho Power Company (Idaho Power) operates the Evander Andrews Complex located near Mountain Home, Idaho. This is an electric power generating facility which currently utilizes two existing advanced Siemens-Westinghouse (S-W) 251B12A, simple cycle combustion turbines (CT2 and CT3) and generators. The heat input for each turbine is approximately 508 MMBtu/hr and the generating capacity is approximately 45 megawatts each. Both turbines are identical in design, fired only with natural gas, and are equipped with dry low NO_x (DLN) burners. DLN burners combust a leaner mixture of fuel and air, thereby lowering the peak temperature and NO_x emissions. During warm weather, evaporative cooling and inlet air fogging may be used to cool the turbine inlet air. Natural gas flow rates are measured continuously by a certified fuel flow monitoring system. Facility operations are monitored by an integrated microprocessor-based control system. Each combustion turbine is equipped with a continuous emissions monitoring system (CEMS) to measure NO_x, carbon monoxide (CO), and diluent oxygen (O₂). Also included is a data acquisition and handling system (DAHS) for data acquisition and analysis. These data systems are used during all facility operations, including startup and shutdown. Ancillary units at the facility include a natural gas-fired heater to heat the natural gas prior to combustion and a diesel-fired emergency fire pump.

In 2007, the facility added a 170-megawatt (170-MW) Siemens Westinghouse Model SGT6-5000F (previously named W501F) simple-cycle combustion turbine (CT1) with generator and a GTS Energy, 3.8 MMBtu/hr natural gas-fired heater (H2) used to heat the natural gas prior to combustion in the turbine. The turbine is used to provide electrical power to meet peak system load requirements according to the facility.

In December of 2008, the facility added a 500 kW diesel-fired emergency standby internal combustion engine used to power an electrical generator.

3.2 Facility Permitting History

Tier I Operating Permit History - Previous 5-year permit term April 27, 2010 to April 27, 2015

The following information is the permitting history of this Tier I facility during the previous five-year permit term which was from April 27, 2010 to April 27, 2015. This information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

April 27, 2010 T1-2009.0132, DEQ issued the renewed T1 operating permit, Permit status (A) but will be (S) as a result of this permitting action

Underlying Permit History - Includes every underlying permit issued to this facility

The following information is the comprehensive permitting history of all underlying applicable permits issued to this Tier I facility. This information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

December 29, 2008	X-2008.0197, DEQ issued an exemption for an emergency diesel-fired IC engine to power an electrical generator, Permit status (A)
December 16, 2008	T1-2007.0158, Amend the Tier I operating permit to incorporate permit conditions of PTC No. P-060065, Permitting action description, Permit status (S)
May 1, 2007	PTC No. P-060065, Initial construction of a 170 MW turbine and 3.5 MMBtu/hr fuel heater, Permit status (A)
September 9, 2005	T1-2007.0158, DEQ issued the facility's initial T1 operating permit, Permit status (S)
March 18, 2005	PTC No. P-040031, Streamline permit conditions for consistency, Permit status (A)
August 21, 2002	PTC No. P-010051, Modification of permit requirements, Permit status (S)
July 19, 2002	PTC No. P-010051, Modification of permit requirements, Permit status (S)
September 14, 2001	PTC No. P-010742, Initial permit for facility construction, Permit status (S)

4. APPLICATION SCOPE AND APPLICATION CHRONOLOGY

4.1 Application Scope

This permit is the renewal of the facility's currently effective Tier I operating permit. This Tier I operating permit incorporates the 500 kW emergency diesel-fired IC engine and the applicable requirements in 40 CFR 60, Subpart III. It also provides for alternative CO Continuous Emissions Monitoring System (CEMS) quality assurance/quality control requirements to align the CO requirements with the NO_x requirements for the simple cycle gas turbines. In addition, the permit provides alternate stratification test requirements for the simple cycle gas turbines.

4.2 Application Chronology

August 27, 2014	DEQ received an application.
October 17, 2014	DEQ determined that the application was complete.
December 3, 2014	DEQ made available the draft permit and statement of basis for peer and regional office review.
December 10, 2014	DEQ made available the draft permit and statement of basis for applicant review.
December 31, 2014 – January 30, 2015	DEQ provided a public comment period on the proposed action.
February 4, 2015	DEQ provided the proposed permit and statement of basis for EPA review.
April 2, 2015	DEQ issued the final permit and statement of basis.

5. EMISSIONS UNITS, PROCESS DESCRIPTION(S), AND EMISSIONS INVENTORY

This section lists the emissions units, describes the production or manufacturing processes, and provides the emissions inventory for this facility. The information presented was provided by the applicant in its permit application. Also listed in this section are the insignificant activities based on size or production rate.

5.1 Process No. 1 – Combustion Turbine (CT1)

Table 5.1 lists the emissions units and control devices associated with combustion turbine CT1.

Table 5.1 EMISSIONS UNITS, CONTROL DEVICE, AND DISCHARGE POINT INFORMATION

Emissions Unit ID No.	Emissions Unit Description	Control Device (if applicable)	Emission Point ID No.
CT1	Combustion Turbine (CT1) Siemens-Westinghouse, Model SGT6-5000F Nominal Output: 170 MW Rated Heat Input: 1820 MMBtu/hr Constructed in 2007	Ultra low NO _x burners, good combustion control, and exclusive use of natural gas	Stack Height: 60 ft 24'9" by 21'10" rectangular duct Vertical exit Uncovered Eight internal baffles for sound suppression

The Idaho Power Evander Andrews Complex utilizes one Siemens-Westinghouse Model SGT6-5000F combustion turbine operated in simple cycle mode that is designated as CT1 to generate electricity. The unit has a generating capacity of approximately 170 MW, and natural gas will be used exclusively for fuel. Ancillary equipment includes a natural gas-fired fuel heater. The combustion turbine is equipped with Ultra Low-NO_x combustion technology to minimize NO_x emissions and the facility is monitored by an integrated, microprocessor-based control system. The system includes a data acquisition and handling system (DAHS) and a Continuous Emissions Monitoring System (CEMS) which operates at all times to monitor NO_x and CO emissions, including startup and shutdown.

5.2 Process No. 2 – Combustion Turbines (CT2 and CT3)

Table 5.2 lists the emissions units and control devices associated with combustion turbines CT2 and CT3.

Table 5.2 EMISSIONS UNITS, CONTROL DEVICE, AND DISCHARGE POINT INFORMATION

Emissions Unit ID No.	Emissions Unit Description	Control Device (if applicable)	Emission Point ID No.
CT2	Combustion Turbine (CT2) Siemens-Westinghouse, Model 251B2A Serial No. 46S8140-1 Nominal Output: 45 MW Rated Heat Input: 508 MMBtu/hr Constructed in 2001	Dry Low NO _x (DLN) burners, good combustion control, and exclusive use of natural gas	Stack Height: 75 ft 19'4" by 9'7" rectangular duct Vertical exit Uncovered Three internal baffles for sound suppression Exit flow rate: 900,000 acfm Stack exit temp: 841 to 1020 F
CT3	Combustion Turbine (CT3) Siemens-Westinghouse, Model 251B2A Serial No. 46S8156-1 Nominal Output: 45 MW Rated Heat Input: 508 MMBtu/hr Constructed in 2001		

The Idaho Power Evander Andrews Complex utilizes two Siemens-Westinghouse (S-W) Model 251B12A combustion turbines operated in simple cycle mode that are designated as CT2 and CT3. Each unit has a generating capacity of approximately 45 MW, and natural gas will be used exclusively for fuel. Operating scenarios include firing with or without inlet air evaporative cooling and inlet air fogging. Ancillary equipment includes a natural gas-fired fuel heater and a diesel-fired fire pump. Each combustion turbine is equipped with dry low-NO_x combustion technology to minimize NO_x emissions and the facility is monitored by an integrated, microprocessor-based control system. The system includes a data acquisition and handling system (DAHS) and a Continuous Emissions Monitoring System (CEMS) which operates at all times to monitor NO_x and CO emissions, including startup and shutdown.

5.3 Process No. 3 – Fuel Heaters (H1 and H2)

Table 5.3 lists the emissions units and control devices associated with the fuel heaters H1 and H2.

Table 5.3 EMISSIONS UNITS, CONTROL DEVICE, AND DISCHARGE POINT INFORMATION

Emissions Unit ID No.	Emissions Unit Description	Control Device (if applicable)	Emission Point ID No.
H1	Fuel Heater (H1) Thermoflux, Inc., Model S.O. 9113 Rated Heat Input: 2.2 MMBtu/hr	None	Exhaust stack
H2	Fuel Heater (H2) GTS Energy Rated Heat Input: 3.8 MMBtu/hr	None	Exhaust stack

Fuel heater (H1) is used to heat the natural gas fuel before it enters turbines 2 and 3. Fuel heater (H2) is used to heat the natural gas before it enters turbine CT1. Both of the fuel heaters combust natural gas. The manufacturer of H1 heater is Thermoflux, Inc., and the heat input is approximately 2.2 MMBtu/hr. The manufacturer of H2 heater is GTS Energy, and heat input is approximately 3.8 MMBtu/hr. The heaters will increase the temperature of natural gas fuel to the turbines, thereby increasing the combustion efficiency of the turbines and prevent damage.

5.4 Process No. 4 – Emergency Fire Pump and Electrical Generator

Table 5.34 lists the emissions units and control devices associated with the emergency fire pump and electrical generator.

Table 5.4 EMISSIONS UNITS, CONTROL DEVICE, AND DISCHARGE POINT INFORMATION

Emissions Unit ID No.	Emissions Unit Description	Control Device (if applicable)	Emission Point ID No.
FP1	Emergency Fire Pump Clarke Detroit Diesel, Model VMFP 04HT Compression Ignition Rated Horsepower: 231 bhp Constructed in 2000	None	Exhaust stack
EG1	Emergency Electrical Generator Cummins, Model QSX15-G9 Nonroad 2 Compression Ignition Rate Horsepower: 755 bhp (500 kW) Constructed in 2007	None	Exhaust stack

The 231 horsepower diesel-fired back-up emergency fire pump (FP1) will be used only as an emergency back-up system for the facility in the event of a power failure and fire. Hourly usage of the emergency fire pump will be measured continuously with a non-resettable elapsed time meter. The 500 kW diesel-fired emergency electrical generator will be used only as an emergency backup system in the event of a power failure. Hourly usage of the generator will also be measured continuously with a non-resettable elapsed time meter.

5.5 Insignificant Emissions Units Based on Size or Production Rate

No emissions unit or activity subject to an applicable requirement may qualify as an insignificant emissions unit or activity. As required by IDAPA 58.01.01.317.01.b, insignificant emissions units (IEU's) based on size or production rate must be listed in the permit application. Table 5.5 lists the IEU's identified in the permit application. Also summarized is the regulatory authority or justification for each IEU.

Table 5.5 INSIGNIFICANT EMISSION UNITS AND REGULATORY AUTHORITY/JUSTIFICATION

Emissions Unit / Activity	Regulatory Authority / Justification
VOC or gasoline storage tanks	58.01.01.317.01.b.i.(3)
Welding	58.01.01.317.01.b.i.(9)
Surface coating	58.01.01.317.01.b.i.(17)
Cleaning and stripping activities	58.01.01.317.01.b.i.(26)

5.6 Non-applicable Requirements for Which a Permit Shield is Requested

This section of the permit lists the regulations for which the facility has requested, and DEQ proposes to grant, a permit shield pursuant to IDAPA 58.01.01.325. The facility has not requested a permit shield.

5.7 Emissions Inventory

Table 5.6 summarizes the emissions inventory for this major facility. All values are expressed in units of tons-per-year and represent the facility's potential to emit. Potential to emit is defined as the maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hour of operation or on the type or amount of material combusted, stored or processed shall be treated as part of its design if the limitation or the effect it would have on emission is state or federally enforceable.

Listed below Table 5.6 are the references for the emission factors used to estimate the emissions. The documentation provided by the applicant for the emissions inventory and emission factors is provided as Appendix B of this statement of basis.

Table 5.6 EMISSIONS INVENTORY - POTENTIAL TO EMIT (T/yr)

Source Description	PM ₁₀ T/yr	NO _x T/yr	SO ₂ T/yr	CO T/yr	VOC T/yr	Lead T/yr	HAP T/yr	GHG CO ₂ e T/yr
Combustion Turbine (CT1)	43.8	247	4.82	248	12.26	0.0	8.05	948,391
Combustion Turbine (CT2)	12	124	3.4	75	7.3	0.0	1.88	264,710
Combustion Turbine (CT3)	12	124	3.4	75	7.3	0.0	1.88	264,685
Fuel Heater (H1)	0.042	0.84	0.005	0.17	0.0044	0.0	0.47	662
Fuel Heater (H2)	0.13	1.91	0.11	1.60	0.21	0.0	1.30	1,876
Emergency Fire Pump (FP1)	0.003	0.017	0.0024	0.064	0.01	0.0	0.00004	1.5
Emergency Electrical Generator (EG1)	0.06	2.0	0.0	1.08	0.13	0.0	0.001	2.6
Total Emissions	68	500	11.7	401	27.2	0.0	13.5	1,480,329

The emissions associated with the facility were established in the emissions inventories in the Statement of Basis for PTC No. 060065 issued May 1, 2007 and PTC No. P-040031 issued March 18, 2005. The emissions associated with the Emergency Electrical Generator were established in the exemption concurrence, X-2008.0197, issued December 29, 2008.

6. EMISSIONS LIMITS AND MRRR

This section contains the applicable requirements for this major facility. Where applicable, monitoring, recordkeeping and reporting requirements (MRRR) follow the applicable requirement and state how compliance with the applicable requirement is to be demonstrated.

This section is divided into several subsections. The first subsection lists the requirements that apply facility wide. The next subsection lists the emissions units- and emissions activities-specific applicable requirements. The final subsection contains the general provisions that apply to all major facilities subject to Idaho DEQ's Tier I operating permit requirements.

This section contains the following subsections:

- Facility-Wide Conditions;
- Combustion Turbine 1 (CT1) Emissions Limits;
- Combustion Turbine 2 & 3 (CT2 & CT3) Emissions Limits;
- Fuel Heaters (H1 & H2) Emissions Limits;
- Emergency Fire Pump and Electrical Generator (FP1 & EG1) Emissions Limits;
- Tier I Operating Permit General Provisions.

MRRR

Immediately following each applicable requirement (permit condition) is the periodic monitoring regime upon which compliance with the underlying applicable requirement is demonstrated. A periodic monitoring regime consists of monitoring, recordkeeping and reporting requirements for each applicable requirement. If an applicable requirement does not include sufficient monitoring, recordkeeping and reporting to satisfy IDAPA 58.01.01.322.06, 07, and 08, then the permit must establish adequate monitoring, recordkeeping and reporting sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit. This is known as gap filling. In addition to the specific MRRR described under each permit condition, generally applicable facility-wide conditions and general provisions may also be required, such as monitoring, recordkeeping, performance testing, reporting, and certification requirements.

The discussion of each permit condition includes the legal and factual basis for the permit condition. If a permit condition was changed due to facility draft or public comments, a description of why and how the condition was changed is provided.

State Enforceability

An applicable requirement that is not required by the federal CAA and has not been approved by EPA as a SIP-approved requirement is identified as a "State-only" requirement and is enforceable only under state law. State-only requirements are not enforceable by the EPA or citizens under the CAA. State-only requirements are identified in the permit within the citation of the legal authority for the permit condition.

Federal Enforceability

Unless identified as "State-only," all applicable requirements, including MRRR, are state and federally enforceable. It should be noted that while a violation of a MRRR is a violation of the permit, it is not necessarily a violation of the underlying applicable requirement (e.g. emissions limit).

To minimize the length of this document, the following permit conditions and MRRR have been paraphrased. Refer to the permit for the complete requirements.

6.1 Facility-Wide Conditions

Permit Condition 3.1 - Fugitive Dust

All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651.

[IDAPA 58.01.01.650-651, 3/30/07]

MRRR (Permit Conditions 3.2 through 3.4)

- Monitor and maintain records of the frequency and the methods used to control fugitive dust emissions;
- Maintain records of all fugitive dust complaints received and the corrective action taken in response to the complaint;
- Conduct facility-wide inspections of all sources of fugitive emissions. If any of the sources of fugitive dust are not being reasonably controlled, corrective action is required.

[IDAPA 58.01.01.322.06, 07, 08, 4/5/2000]

Permit Condition 3.5 - Odors

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.

[IDAPA 58.01.01.775-776 (State-only), 5/1/94]

MRRR (Permit Condition 3.6)

- Maintain records of all odor complaints received and the corrective action taken in response to the complaint;
- Take appropriate corrective action if the complaint has merit, and log the date and corrective action taken.

[IDAPA 58.01.01.322.06, 07 (State only), 5/1/94]

Permit Condition 3.7 - Visible Emissions

The permittee shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this section.

[IDAPA 58.01.01.625, 4/5/00]

MRRR (Permit Condition 3.8 through 3.9)

- Conduct facility-wide inspections of all emissions units subject to the visible emissions standards (or rely on continuous opacity monitoring);
- If visible emissions are observed, take appropriate corrective action and/or perform a Method 9 opacity test;
- Maintain records of the results of each visible emissions inspection.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

Permit Conditions 3.10 through 3.14 - Excess Emissions

The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions. The provisions of IDAPA 58.01.01.130-136 shall govern in the event of conflicts between the excess emissions facility wide conditions and the regulations of IDAPA 58.01.01.130-136.

MRRR (Permit Conditions 3.10 through 3.14)

Monitoring, recordkeeping and reporting requirements for excess emissions are provided in Sections 131 through 136.

- Take appropriate action to correct, reduce, and minimize emissions from excess emissions events;
- Prohibit excess emissions during any DEQ Atmospheric Stagnation Advisory or Wood Stove Curtailment Advisory;
- Notify DEQ of each excess emissions events as soon as possible, including information regarding upset, breakdown, or safety events.
- Submit a report for each excess emissions event to DEQ;
- Maintain records of each excess emissions event.

Permit Condition 3.15 – Fuel-Burning Equipment PM Standards

The permittee shall not discharge to the atmosphere from any fuel-burning equipment PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas, 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid, 0.050 gr/dscf of effluent gas corrected to 8% oxygen by volume for coal, and 0.080 gr/dscf of effluent gas corrected to 8% oxygen by volume for wood products.

[IDAPA 58.01.01.676-677, 5/1/94]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.16 - Sulfur Content Limits

The permittee shall not sell, distribute, use, or make available for use any of the following:

- Distillate fuel oil containing more than the following percentages of sulfur:
 - ASTM Grade 1 fuel oil, 0.3% by weight.
 - ASTM Grade 2 fuel oil, 0.5% by weight.
- Coal containing greater than 1.0% sulfur by weight.
- DEQ may approve an exemption from these fuel sulfur content requirements (IDAPA 58.01.01.725.01 725.04) if the permittee demonstrates that, through control measures or other means, SO₂ emissions are equal to or less than those resulting from the combustion of fuels complying with these limitations.

[IDAPA 58.01.01.725, 3/29/10]

MRRR - (Permit Condition 3.17)

The permittee shall maintain documentation of supplier verification of fuel sulfur content on an as received basis.

[IDAPA 58.01.01.322.06, 5/1/94]

Permit Condition 3.18 - Open Burning

The permittee shall comply with the *Rules for Control of Open Burning*, IDAPA 58.01.01.600-623.

[IDAPA 58.01.01.600-623, 5/08/09]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.19 - Asbestos

The permittee shall comply with all applicable portions of 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility.

[40 CFR 61, Subpart M]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.20 - Accidental Release Prevention

(a)

An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, shall comply with the requirements of the Chemical Accident Prevention Provisions at 40 CFR 68 no later than the latest of the following dates:

- Three years after the date on which a regulated substance present above a threshold quantity is first listed under 40 CFR 68.130.
- The date on which a regulated substance is first present above a threshold quantity in a process.

[40 CFR 68.10 (a)]

(b)

This facility is subject to 40 CFR Part 68 and shall certify compliance with all requirements of 40 CFR Part 68, including the registration and submission of the RMP, as part of the annual compliance certification required by 40 CFR 70.6(c)(5).

[40 CFR 68.215(a)(2); IDAPA 58.01.01.322.11, 4/6/05; 40 CFR 68.215(a)(ii)]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.21 - Recycling and Emissions Reductions

The permittee shall comply with applicable standards for recycling and emissions reduction of refrigerants and their substitutes pursuant to 40 CFR 82, Subpart F, Recycling and Emissions Reduction.

[40 CFR 82, Subpart F]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.22 through 3.23- NSPS/NESHAP General Provisions

This facility is subject to NSPS Subparts GG, KKKK, and IIII. The facility is also subject to NESHAP Subparts ZZZZ, and is therefore required to comply with applicable General Provisions.

[40 CFR 60, Subpart A]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.24 - Monitoring and Recordkeeping

The permittee shall maintain sufficient records to assure compliance with all of the terms and conditions of this operating 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, 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 58.01.01.322.06, 07, 5/1/94]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Conditions 3.25 through 3.26 - Performance Testing

If performance testing is required, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test or shorter time period as provided in a permit, order, consent decree, or by DEQ approval. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests such testing not be performed on weekends or state holidays.

All 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, prior to conducting any performance test, the permittee is encouraged to submit in writing to DEQ, at least 30 days in advance, the following for approval:

- The type of method to be used
- Any extenuating or unusual circumstances regarding the proposed test
- The proposed schedule for conducting and reporting the test

[IDAPA 58.01.01.157, 4/5/00; IDAPA 58.01.01.322.06, 08.a, 09, 5/1/94]

MRRR (Permit Conditions 3.27 and 3.28)

The permittee shall submit compliance test report(s) to DEQ following testing.

[IDAPA 58.01.01.157, 4/5/00; IDAPA 58.01.01.322.06, 08.a, 09, 5/1/94]

Permit Condition 3.29 - Reports and Certifications

This permit condition establishes generally applicable MRRR for submittal of reports, certifications, and notifications to DEQ and/or EPA as specified.

[IDAPA 58.01.01.322.08, 11, 5/1/94]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.30 – Documentation for Exemptions under IDAPA 58.01.01.200

This permit condition establishes that the source maintain documentation on site that identifies any exemptions and verifies that the source qualifies for the exemption.

[IDAPA 58.01.01.220.2, 4/5/00; IDAPA 58.01.01.322.01, 3/19/99]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.31 - Incorporation of Federal Requirements by Reference

Unless expressly provided otherwise, any reference in this permit to any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of that document for the purposes of the reference, including any notes and appendices therein.

[IDAPA 58.01.01.107, 4/7/11]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

6.2 Emissions Unit-Specific Emissions Limits and MRR

Emissions Unit No. 1 - CT1

Permit Condition 4.1 – Nitrogen Oxides (NO_x) Emissions Limit

The permittee shall meet the emission limit for NO_x specified in Table 1 of 40 CFR 60 Subpart KKKK.

When operating at or above 75% of peak load, the permittee shall not exceed the NO_x limit of 15 ppm at 15% O₂ or 54 ng/J of useful output (0.43 pounds per megawatt-hour (lb/MWh) for new, modified, or reconstructed combustion turbine firing natural gas with a heat input at peak load (HHV) greater than 850 MMBtu/hr. The emissions limit is based on a 4-hour rolling average in accordance with 40CFR 60.4350(g) and 60.4380(b)(1).

When operating below 75% of peak load, the permittee shall not exceed the NO_x limit of 96 ppm at 15% O₂ or 590 ng/J of useful output (4.7 pounds per megawatt-hour (lb/MWh)) for turbines operating at less than 75 percent of peak load. The emissions limit is based on a 4-hour rolling average in accordance with 40CFR 60.4350(g) and 60.4380(b)(1).

For operating periods during which multiple emissions standards apply, the applicable standard is the average of the applicable standards during each hour. For hours with multiple emissions standards, the applicable limit for that hour is determined based on the condition that corresponded to the highest emissions standard.

MRRR - (Permit Conditions 4.6, 4.16, 4.18-4.21, 4.25, 4.27)

The facility is required to measure, monitor, and record the NO_x concentration.

Permit Condition 4.2 – Sulfur Dioxide (SO₂) Emissions Limit

The permittee shall not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO₂ in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output, or

The permittee shall not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input.

MRRR - (Permit Conditions 4.7, 4.8, 4.13, 4.17, 4.18, 4.26, 4.27)

The facility is required to measure, monitor, and record the SO₂ concentration.

Permit Condition 4.3 – NO_x and CO Emissions

Emissions of nitrogen oxide (NO_x) and carbon monoxide (CO) from the CT1 stack shall not exceed any corresponding emissions limits listed in Table 4.3.

Table 4.3. Combustion Turbine CT1 Emissions Limits^a.

Source Description	NO _x (T/yr)	CO (T/yr)
Combustion Turbine CT1	247.0	248.0

^aThe permittee shall not exceed the T/yr listed based on any consecutive 12-month period.

MRRR - (Permit Conditions 4.6, 4.9-4.16, 4.20-4.27)

The facility is required to operate a CEMS for both NO_x and CO, and to certify and QA all data. An alternative CO CGA and RATA schedule is specified in PC 4.6 and 4.10 as requested by the Applicant.

Emissions Unit No. 2 – CT2 and CT3

Permit Condition 5.1

Emissions from combustion turbines 2 and 3 combined shall not exceed 248 tons per year of NO_x and 150 tons per year of CO, based on any consecutive 12-month period. The annual limits shall include emissions during startup, shutdown, and malfunction of the turbines.

MRRR - (Permit Conditions 5.3, 5.5, 5.7-5.9, 5.12-5.14)

The facility is required to operate a CEMS for both NO_x and CO, while complying with all the monitoring requirements in 40 CFR 72.9(b). An alternative CO CGA and RATA schedule is specified in PCs 5.5 and 5.8 as requested by the Applicant.

Permit Condition 5.2

On and after the date the performance test required by 40 CFR 60.8 is completed, the owner or operator shall not cause to be discharged to the atmosphere from gas turbines 2 or 3, any gases which contain NO_x in excess of 142 parts per million by volume on a dry basis (ppmvd) at 15% oxygen in accordance with 40 CFR 60.332(a)(1). Any emissions which exceed this standard as a result of startup and shutdown shall be addressed in accordance with Permit Condition 5.16.

MRRR - (Permit Conditions 5.6, 5.10, 5.11, 5.15-5.16)

This NO_x limit is established by the NSPS and all monitoring and performance tests are specified under the Subpart.

Permit Condition 5.4

No fuel containing sulfur in excess of 0.8% by weight shall be burned in gas turbines CT2 or CT3 in accordance with 40 CFR 60.333(b).

MRRR - (Permit Conditions 5.10, 5.11, 5.16)

The facility is required to monitor the fuel and conduct performance tests to show compliance with the NSPS.

Permit Condition 6.1

The PM emissions from fuel heaters H1 and H2 shall not exceed the grain-loading limit of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for natural gas, as required by IDAPA 58.01.01.676.

MRRR

No specific monitoring is required for this condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 6.2

The NO_x and CO emissions from the H2 fuel heater stack shall not exceed any corresponding emissions rate limits listed in Table 6.3.

Table 6.3. H2 fuel heater emissions limits^a.

Source Description	NO _x	CO
	T/yr	T/yr
Fuel heater H2	1.91	1.60

^a The permittee shall not exceed the T/yr listed based on any consecutive 12-month period.

MRRR - (Permit Conditions 6.3, 6.4)

The facility is required to measure and monitor the fuel usage on a monthly basis.

Permit Condition 6.3

The H1 natural gas heater shall not use more than 11,114,353 cubic feet per year (cf/yr) of natural gas.

The natural gas combusted in the H2 fuel heater shall not exceed 31,500,000 cubic feet in any consecutive 12-month period.

MRRR - (Permit Condition 6.4)

The facility is required to measure and monitor the fuel usage on a monthly basis.

Permit Condition 7.1

The permittee shall not sell, distribute, use, or make available for use any distillate fuel oil containing more than the following percentages of sulfur:

- ASTM Grade No. 1 fuel oil - 0.3% by weight (3000 ppmw).
- ASTM Grade No. 2 fuel oil - 0.5% by weight (5000 ppmw).

MRRR - (Permit Condition 7.10)

The facility is required to verify the fuel sulfur content through supplier documentation.

Permit Condition 7.2

The permittee shall certify the emergency electrical generator to the emission standards for new nonroad CI engines in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.

MRRR - (Permit Conditions 7.4-7.7)

The facility is required to certify the engine and ensure that all emission standards are met for new nonroad CI engines.

Permit Condition 7.3

The emergency fire water pump shall be operated only as an emergency fire water pump. This includes regular maintenance, testing, and emergency use. The annual hours of operation shall not exceed 50 hours per year (hr/yr).

MRRR - (Permit Condition 7.9)

The facility is required to monitor and record the hours of operation on a monthly basis.

Permit Condition 7.5

The permittee shall use diesel fuel in the emergency electrical generator that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

MRRR - (Permit Condition 7.10)

The facility is required to verify the fuel sulfur content through supplier documentation.

Permit Condition 7.8

The permittee must operate the emergency electrical generator according to the requirements below. In order for the engine to be considered an emergency stationary ICE under the subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, is prohibited. If the permittee does not operate the engine according to the requirements, the engine will not be considered an emergency engine under the subpart and must meet all requirements for non-emergency engines.

- There is no time limit on the use of emergency stationary ICE in emergency situations.
- The permittee may operate the emergency stationary ICE for any combination of the purposes specified below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed counts as part of the 100 hours per calendar year.
 - Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
 - Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

MRRR - (Permit Condition 7.11)

The facility is required to keep records of the operation of the engine in both emergency and non-emergency and the reason for the operation.

6.3 General Provisions

Unless expressly stated, there are no MRRR for the general provisions.

General Compliance, Duty to Comply

The permittee must comply with the terms and conditions of the permit.

[IDAPA 58.01.01.322.15.a, 5/1/94; 40 CFR 70.6(a)(6)(i)]

General Compliance, Need to Halt or Reduce Activity Not a Defense

The permittee cannot use the fact that it would have been necessary to halt or reduce an activity as a defense in an enforcement action.

[IDAPA 58.01.01.322.15.b, 5/1/94; 40 CFR 70.6(a)(6)(ii)]

General Compliance, Duty to Supplement or Correct Application

The permittee must promptly submit such supplementary facts or corrected information upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application. The permittee must also provide information as necessary to address any new requirements that become applicable after the date a complete application has been filed but prior to the release of a draft permit.

[IDAPA 58.01.01.315.01, 5/1/94; 40 CFR 70.5(b)]

Reopening, Additional Requirements, Material Mistakes, Etc.

This term lists the instances when the permit must be reopened and revised, including times when additional requirements become applicable, when the permit contains mistakes, or when revision or revocation is necessary to assure compliance with applicable requirements.

[IDAPA 58.01.01.322.15.c, 5/1/94; IDAPA 58.01.01.386, 3/19/99; 40 CFR 70.7(f)(1), (2); 40 CFR 70.6(a)(6)(iii)]

Reopening, Permitting Actions

This term discusses modification, revocation, reopening, and/or reissuance of the permit for cause. If the permittee files a request to modify, revoke, reissue, or terminate the permit, the request does not stay any permit condition, nor does notification of planned changes or anticipated noncompliance.

[IDAPA 58.01.01.322.15.d, 5/1/94; 40 CFR 70.6(a)(6)(iii)]

Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

[IDAPA 58.01.01.322.15.e, 5/1/94; 40 CFR 70.6(a)(6)(iv)]

Information Requests

The permittee must furnish, within a reasonable time to DEQ, any information, including records required by the permit, that is requested in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.

[Idaho Code §39-108; IDAPA 58.01.01.122, 4/5/00; IDAPA 58.01.01.322.15.f, 4/5/00; 40 CFR 70.6(a)(6)(v)]

Information Requests, Confidential Business Information

Upon request, the permittee must furnish to DEQ copies of records required to be kept by this permit. For information claimed to be confidential, the permittee may furnish such records along with a claim of confidentiality in accordance with Idaho Code §9-342A and applicable implementing regulations including IDAPA 58.01.01.128.

[IDAPA 58.01.01.322.15.g, 5/1/94; IDAPA 58.01.01.128, 4/5/00; 40 CFR 70.6(a)(6)(v)]

Severability

If any provision of the permit is held to be invalid, all unaffected provisions of the permit will remain in effect and enforceable.

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

Changes Requiring Permit Revision or Notice

The permittee may not commence construction or modification of any stationary source, facility, major facility, or major modification without first obtaining all necessary permits to construct or an approval under IDAPA 58.01.01.213, or complying with IDAPA 58.01.01.220 through 223. The permittee must comply with IDAPA 58.01.01.380 through 386 as applicable.

[IDAPA 58.01.01.200-223, 4/2/08; IDAPA 58.01.01.322.15.i, 3/19/99; IDAPA 58.01.01.380-386, 7/1/02; 40 CFR 70.4(b)(12), (14), (15), and 70.7(d), (e)]

Changes that are not addressed or prohibited by the Tier I operating permit require a Tier I operating permit revision if such changes are subject to any requirement under Title IV of the CAA, 42 U.S.C. Section 7651 through 7651c, or are modifications under Title I of the CAA, 42 U.S.C. Section 7401 through 7515. Administrative amendments (IDAPA 58.01.01.381), minor permit modifications (IDAPA 58.01.01.383), and significant permit modifications (IDAPA 58.01.01.382) require a revision to the Tier I operating permit. IDAPA 58.01.01.502(b)(10) changes are authorized in accordance with IDAPA 58.01.01.384. Off permit changes and required notice are authorized in accordance with IDAPA 58.01.01.385.

[IDAPA 58.01.01.381-385, 7/1/02; IDAPA 58.01.01.209.05, 4/11/06; 40 CFR 70.4(b)(14) and (15)]

Federal and State Enforceability

All permit conditions are federally enforceable unless specified in the permit as a state or local only requirement. State and local only requirements are not required under the CAA and are not enforceable by EPA or by citizens.

[IDAPA 58.01.01.322.15.j, 5/1/94; IDAPA 58.01.01.322.15.k, 3/23/98; Idaho Code §39-108; 40 CFR 70.6(b)(1), (2)]

Inspection and Entry

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

- Enter upon the permittee's premises where a Tier I 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; IDAPA 58.01.01.322.15.l, 5/1/94; 40 CFR 70.6(c)(2)]

New Applicable Requirements

The permittee must continue to comply with all applicable requirements and must comply with new requirements on a timely basis.

[IDAPA 58.01.01.322.10, 4/5/00; IDAPA 58.01.01.314.10.a.ii, 5/1/94; 40 CFR 70.6(c)(3) citing 70.5(c)(8)]

Fees

The owner or operator of a Tier I source shall pay annual registration fees to DEQ in accordance with IDAPA 58.01.01.387 through IDAPA 58.01.01.397.

[IDAPA 58.01.01.387, 4/2/03; 40 CFR 70.6(a)(7)]

Certification

All documents submitted to DEQ shall be certified in accordance with IDAPA 58.01.01.123 and comply with IDAPA 58.01.01.124.

[IDAPA 58.01.01.322.15.o, 5/1/94; 40 CFR 70.6(a)(3)(iii)(A); 40 CFR 70.5(d)]

Renewal

The permittee shall submit an application to DEQ for a renewal of this permit at least six months before, but no earlier than 18 months before, the expiration date of this operating permit. To ensure that the term of the operating permit does not expire before the permit is renewed, the owner or operator is encouraged to submit a renewal application nine months prior to the date of expiration.

[IDAPA 58.01.01.313.03, 4/5/00; 40 CFR 70.5(a)(1)(iii)]

If a timely and complete application for a Tier I operating permit renewal is submitted, but DEQ fails to issue or deny the renewal permit before the end of the term of this permit, then all the terms and conditions of this permit including any permit shield that may have been granted pursuant to IDAPA 58.01.01.325 shall remain in effect until the renewal permit has been issued or denied.

[IDAPA 58.01.01.322.15.p, 5/1/94; 40 CFR 70.7(b)]

Permit Shield

Compliance with the terms and conditions of the Tier I operating permit, including those applicable to all alternative operating scenarios and trading scenarios, shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

- Such applicable requirements are included and are specifically identified in the Tier I operating permit; or
 - DEQ has determined that other requirements specifically identified are not applicable and all of the criteria set forth in IDAPA 58.01.01.325.01(b) have been met.
- The permit shield shall apply to permit revisions made in accordance with IDAPA 58.01.01.381.04 (administrative amendments incorporating the terms of a permit to construct), IDAPA 58.01.01.382.04 (significant modifications), and IDAPA 58.01.01.384.03 (trading under an emissions cap).
- Nothing in this permit shall alter or affect the following:
 - Any administrative authority or judicial remedy available to prevent or terminate emergencies or imminent and substantial dangers;
 - The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - The applicable requirements of the acid rain program, consistent with 42 U.S.C. Section 7651(g)(a); and
 - The ability of EPA to obtain information from a source pursuant to Section 114 of the CAA; or the ability of DEQ to obtain information from a source pursuant to Idaho Code §39-108 and IDAPA 58.01.01.122.

[Idaho Code §39-108 and 112; IDAPA 58.01.01.122, 4/5/00;
IDAPA 58.01.01.322.15.m, 325.01, 5/1/94; IDAPA 58.01.01.325.02, 3/19/99;
IDAPA 58.01.01.381.04, 382.04, 383.05, 384.03, 385.03, 3/19/99; 40 CFR 70.6(f)]

Compliance Schedule and Progress Reports

- For each applicable requirement for which the source is not in compliance, the permittee shall comply with the compliance schedule incorporated in this permit.
- For each applicable requirement that will become effective during the term of this permit and that provides a detailed compliance schedule, the permittee shall comply with such requirements in accordance with the detailed schedule.

- For each applicable requirement that will become effective during the term of this permit that does not contain a more detailed schedule, the permittee shall meet such requirements on a timely basis.
- For each applicable requirement with which the permittee is in compliance, the permittee shall continue to comply with such requirements.
[IDAPA 58.01.01.322.10, 4/5/00; IDAPA 58.01.01.314.9, 5/1/94; IDAPA 58.01.01.314.10, 4/5/00; 40 CFR 70.6(c)(3) and (4)]

Periodic Compliance Certification

The permittee shall submit compliance certifications during the term of the permit for each emissions unit to DEQ and the EPA as specified.

- Compliance certifications for all emissions units shall be submitted annually unless otherwise specified;
- All original compliance certifications shall be submitted to DEQ and a copy of all compliance certifications shall be submitted to the EPA.
[IDAPA 58.01.01.322.11, 4/6/05; 40 CFR 70.6(c)(5)(iii) as amended, 62 Fed. Reg. 54900, 54946 (10/22/97); 40 CFR 70.6(c)(5)(iv)]

False Statements

The permittee may not 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]

No Tampering

The permittee may not 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]

Semiannual Monitoring Reports.

In addition to all applicable reporting requirements identified in this permit, the permittee shall submit reports of any required monitoring at least every six months as specified.
[IDAPA 58.01.01.322.15.q, 3/23/98; IDAPA 58.01.01.322.08.c, 4/5/00; 40 CFR 70.6(a)(3)(iii)]

Reporting Deviations and Excess Emissions

Each and every applicable requirement, including MRRR, is subject to prompt deviation reporting. Deviations due to excess emissions must be reported in accordance Sections 130-136. All instances of deviation from Tier I operating permit requirements must be included in the deviation reports. The reports must describe the probable cause of the deviation and any corrective action or preventative measures taken. Deviation reports must be submitted at least every six months unless the permit specifies a different time period as required by IDAPA 58.01.01.322.08.c. Examples of deviations include, but are not limited to, the following:

- Any situation in which an emissions unit fails to meet a permit term or condition
- Emission control device does not meet a required operating condition
- Observations or collected data that demonstrate noncompliance with an emissions standard
- Failure to comply with a permit term that requires a report
[IDAPA 58.01.01.322.15.q, 3/23/98; IDAPA 58.01.01.135, 4/11/06; 40 CFR 70.6(a)(3)(iii)]

Permit Revision Not Required, Emissions Trading

No permit revision will be required, under any approved, economic incentives, marketable permits, emissions trading, and other similar programs or processes, for changes that are provided for in the permit.

[IDAPA 58.01.01.322.05.b, 4/5/00; 40 CFR 70.6(a)(8)]

Emergency

In accordance with IDAPA 58.01.01.332, an “emergency” as defined in IDAPA 58.01.01.008, constitutes an affirmative defense to an action brought for noncompliance with such technology-based emissions limitation if the conditions of IDAPA 58.01.01.332.02 are met.

[IDAPA 58.01.01.332.01, 4/5/00; 40 CFR 70.6(g)]

7. REGULATORY REVIEW

7.1 Attainment Designation (40 CFR 81.313)

The facility is located in Elmore which is designated as attainment or unclassifiable for PM₁₀, PM_{2.5}, CO, NO₂, SO_x, and Ozone. Reference 40 CFR 81.313.

7.2 Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)

The Evander Andrews complex is a Title V classified facility because it is a major source for NO_x and CO. It is subject to the Tier I operating permit requirements of IDAPA 58.01.01.300.

7.3 PSD Classification (40 CFR 52.21)

The Evander Andrews complex has combined permitted emissions greater than 250 tons per year, and therefore the Evander Andrews complex is classified as a PSD facility. However, since becoming a PSD facility, no modifications have been made to trigger any PSD requirements.

7.4 NSPS Applicability (40 CFR 60)

Combustion turbines CT2 and CT3 are subject to 40 CFR 60 Subpart GG. Combustion turbine CT1 is subject to 40 CFR 60 Subpart KKKK. Applicable NSPS requirements are included in the Tier I permit. Additional discussion of the specific requirements regarding conditions and applicable dates can be found in the Statement of Basis for the Tier I operating permit, issued on December 16, 2008.

The emergency electrical generator (EG1) is subject to 40 CFR 60 Subpart IIII. Below is a breakdown of the subpart and the applicable requirements.

40 CFR 60 Subpart IIII..... Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

§ 60.4200 Am I subject to this Subpart?

(a) *The provisions of this Subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this Subpart, the date that construction commences is the date the engine is ordered by the owner or operator.*

(2) *Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:*

(i) *Manufactured after April 1, 2006 and are not fire pump engines, or*

(ii) *Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.*

(3) *Owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005.*

(4) The provisions of §60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.

(b) The provisions of this Subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) If you are an owner or operator of an area source subject to this Subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this Subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this Subpart applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this Subpart as described in 40 CFR part 1068, Subpart C (or the exemptions described in 40 CFR part 89, Subpart J and 40 CFR part 94, Subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

EG1 is a stationary compression ignition engine and was installed in August 2008. Therefore the engine is subject to the Subpart.

§ 60.4205 *What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?*

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

The engine must comply with the emission standards for new nonroad CI engines in §60.4202.

The subpart requires that the permittee comply with Table 1 per 40 CFR 89.112.

§ 60.4206 *How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?*

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

The permittee must operate the engine for the life of the unit in accordance with manufacturer-approved methods.

§ 60.4207 *What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this Subpart?*

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this Subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel.

The permittee has stated that they will operate the engine in accordance with 40 CFR 80.510(b). The fuel sulfur content cannot exceed 15 ppm or 0.0015% by weight. All emissions calculations assume that percentage.

§ 60.4209 *What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?*

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

A non-resettable hour meter shall be installed on the engine.

§ 60.4211 *What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?*

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this Subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.

The permittee is subject to 60.4205(b) and therefore the engine must be installed and configured according to the manufacturer's specifications.

(f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

Maintenance and testing of the engine shall not exceed 100 hours per year.

§ 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

The engine does not meet the criteria set forth in the subpart requiring notification unless it is uncertified.

7.5 NESHAP Applicability (40 CFR 61)

The NESHAP provisions do not apply to this facility.

7.6 MACT Applicability (40 CFR 63)

The emergency electrical generator (EG1) is subject to 40 CFR 63 Subpart ZZZZ. Below is a breakdown of the subpart and the applicable requirements.

40 CFR 63 Subpart ZZZZ.... NESHAPS for Stationary Reciprocating Internal Combustion Engines

§ 63.6585 Am I subject to this subpart?

You are subject to this Subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(c) An area source of HAP emissions is a source that is not a major source.

The engine is a stationary RICE as defined in this section. In addition, the facility is an area source for HAPs.

§ 63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

As a new stationary RICE at an area source, the engine meets the requirements of the subpart by meeting the requirements of 40 CFR Part 60, Subpart IIII and no further requirements apply under the subpart.

7.7 CAM Applicability (40 CFR 64)

There is no pollution control equipment to make this rule applicable to this facility. Emissions are controlled by dry low-NOx combustion, achieved by reducing peak flame temperature and employing lean pre-mixed combustion. However, "control device" in the rule refers to literal control equipment, so compliance assurance monitoring does not apply to this facility.

7.8 Acid Rain Permit (40 CFR 72-75)

The Acid Rain Program requirements apply to all three combustion turbines. The discussion of the effective dates and the relationship of the Title IV Acid Rain program and its permit requirements of the Title V operating permit program can be found in the Statement of Basis of the Tier I operating permit issued on December 16, 2008.

8. PUBLIC COMMENT

As required by IDAPA 58.01.01.364, a public comment period was made available to the public from December 31, 2014 to January 30, 2015. During this time, comments were submitted in response to DEQ's proposed action. DEQ's responses to the comments submitted are included in the response to public comments document.

9. EPA REVIEW OF PROPOSED PERMIT

As required by IDAPA 58.01.01.366, DEQ provided the proposed permit to EPA Region 10 for its review and comment on February 4, 2015 via e-mail. On March 30, 2015 EPA Regional 10 responded to DEQ via e-mail indicating that EPA will not be review the proposed permit action and that the permit is now eligible for issuance.

Appendix A - Emissions Inventory

Evander Andrews Complex
Emissions Inventory Worksheet
Potential To Emit

Facility Information	221112
NAICS	43.178277
Latitude	-115.732741
Longitude	NAD 83
Datum	979
Altitude (m)	979
Datum	NAD 83
Combustion Turbine 1	
SCC	20100001
Latitude	43.179577
Longitude	-115.73901
Stack Altitude (m)	997
Annual Heat Input (MMBtu)	35943600
MMScf	15630.6

Combustion Turbine 2	
SCC	20100001
Latitude	43.179688
Longitude	-115.739586
Stack Altitude (m)	997
Annual Heat Input (MMBtu)	4402800
MMScf	4862.8
Combustion Turbine 3	
SCC	20100001
Latitude	43.179879
Longitude	-115.737327
Stack Altitude (m)	1000
Annual Heat Input (MMBtu)	4400000
MMScf	4862.8

CT1 Dye Point Heater (H2)	
SCC	10300603
Latitude	43.179614
Longitude	-115.733227
Stack Altitude (m)	985
Annual Heat Input (scf)	31500000
MMScf	31.500
Dye Point Heater (H1)	
SCC	10300603
Latitude	43.179681
Longitude	-115.73481
Stack Altitude (m)	984
Annual Heat Input (scf)	1114353
MMScf	11.134

Fire Pump - 231hp	
SCC	20200102
Latitude	43.179394
Longitude	-115.734845
Stack Altitude (m)	985
Annual Fuel Usage (gal)	137.9
Emergency Generator - 755hp	
SCC	20200102
Latitude	43.17882
Longitude	-115.737905
Stack Altitude (m)	985
Annual Fuel Usage (gal)	236.6

* CEMS annual tonnage multiplied by annual fuel usage. Converted to MMSCF by multiplying MMBTU by 1020 (see AP-42 note c)
 ** Ref: tonnage input from the CEMS annual emissions report.
 *** AP-42 emission factors converted to kgal using 19,300 lb/bbl & 7.09 lb/gal conversion factors
 **** Use same PM10/PM2.5 ratio as given for large diesel (AP-42, Section 3.4)
 Note: Annual heat input values are pulled from CEMS data or billing records, except for the Emergency Fire Pump and the Emergency Diesel Generator which are estimated based on manufacturer's fuel consumption rate and logged hours of operation.
 Note: NOx, CO, SO2 and CO2 are pulled from ECWFS summary which is based on CEMS data uploaded during quarterly EDs

Emission Calculations (Short Tons/Yr)										
	CT1	CT2	CT3	DPH (H1)	DPH (H2)	FP1	EG1			
NOx	219.037	155.3339	235.7050	0.5557	1.5750	0.0417	0.0519			
CO	200.7811	58.48386	50.7030	0.4668	1.3230	0.0090	0.0138			
PM	52.6126	14.6853	14.6853	0.0422	0.1197	0.0029	0.0016			
SO2	0.6000	0	0	0.0033	0.0095	0.0027	0.0000			
VOC	16.7404	4.6726	4.6726	0.0206	0.0596	0.0066	0.0000			
CO2	14,147,917.85	2644,018,789	2644,018,789	661.1795	1873.8859	1.5373	2.6377			
CH4	17.5375	4.8951	4.8951	0.0125	0.0353	0.0001	0.0001			
N2O	1.7538	0.4895	0.4895	0.0012	0.0035	0.0000	0.0000			
PM-10	52.6126	14.6853	14.6853	0.0422	0.1197	0.0029	0.0009			
PM-2.5	52.6126	14.6853	14.6853	0.0422	0.1197	0.0024	0.0008			
TOC	n/a	n/a	n/a	0.0000	n/a	n/a	n/a			
CO2e PTE	944,330	264,685	264,685	662	1,876	0.0034	0.0015			

Emission Factors										
	CT1	CT2	CT3	DPH (H1)	DPH (H2)	FP1	EG1			
NOx	18.02	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*			
CO	18.02	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*			
PM	18.02	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*			
SO2	18.02	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*			
VOC	18.02	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*			
CO2	121233.99	40 CFR 75, Eqn G-4	121233.54	40 CFR 75, Eqn G-4	111220.07	40 CFR 75, Eqn G-4	118976.88			
CH4	2.24	40 CFR 88, Table C-2	2.24	40 CFR 88, Table C-2	2.24	40 CFR 88, Table C-2	2.24			
N2O	0.22	40 CFR 88, Table C-2	0.22	40 CFR 88, Table C-2	0.22	40 CFR 88, Table C-2	0.22			
PM-10	Use PM Above	Use PM Above	Use PM Above	Use PM Above	Use PM Above	Use PM Above	Use PM Above			
PM-2.5	Use PM Above	Use PM Above	Use PM Above	Use PM Above	Use PM Above	Use PM Above	Use PM Above			
TOC	n/a	AP-42, 3.1-2a	n/a	AP-42, 3.1-2a	n/a	AP-42, 3.1-2a	n/a			

Operating Time				
	Qtr 1	Qtr 2	Qtr 3	Qtr 4
CT1	Hours			Total
CT2	Hours			
CT3	Hours			
Fire Pump	Hours			
Generator	Hours			
Dye Point Heater	Hours			

Emission Factors										
	CT1	CT2	CT3	DPH (H1)	DPH (H2)	FP1	EG1			
NOx	18.02	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*			
CO	18.02	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*			
PM	18.02	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*			
SO2	18.02	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*			
VOC	18.02	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*	CEMS*			
CO2	121233.99	40 CFR 75, Eqn G-4	121233.54	40 CFR 75, Eqn G-4	111220.07	40 CFR 75, Eqn G-4	118976.88			
CH4	2.24	40 CFR 88, Table C-2	2.24	40 CFR 88, Table C-2	2.24	40 CFR 88, Table C-2	2.24			
N2O	0.22	40 CFR 88, Table C-2	0.22	40 CFR 88, Table C-2	0.22	40 CFR 88, Table C-2	0.22			
PM-10	Use PM Above	Use PM Above	Use PM Above	Use PM Above	Use PM Above	Use PM Above	Use PM Above			
PM-2.5	Use PM Above	Use PM Above	Use PM Above	Use PM Above	Use PM Above	Use PM Above	Use PM Above			
TOC	n/a	AP-42, 3.1-2a	n/a	AP-42, 3.1-2a	n/a	AP-42, 3.1-2a	n/a			

* CEMS annual tonnage multiplied by annual fuel usage. Converted to MMSCF by multiplying MMBTU by 1020 (see AP-42 note c)
 ** Ref: tonnage input from the CEMS annual emissions report.
 *** AP-42 emission factors converted to kgal using 19,300 lb/bbl & 7.09 lb/gal conversion factors
 **** Use same PM10/PM2.5 ratio as given for large diesel (AP-42, Section 3.4)
 Note: Annual heat input values are pulled from CEMS data or billing records, except for the Emergency Fire Pump and the Emergency Diesel Generator which are estimated based on manufacturer's fuel consumption rate and logged hours of operation.
 Note: NOx, CO, SO2 and CO2 are pulled from ECWFS summary which is based on CEMS data uploaded during quarterly EDs

Combustion Turbine CT1

CT Heat Input Rate	2788	MMBtu/hr (LHV)											
Emission Factors - from Natural Gas-Fired Stationary Gas Turbines (lb/MMBtu)			1,3-Butadiene	Acetaldehyde	Acrolein	Benzene	Ethylbenzene	Formaldehyde	Naphthalene	PAH	Propylene Oxide	Toluene	Xylenes
Table 3.1-3			4.00E-05	6.40E-06	1.20E-05	1.20E-05	3.20E-05	7.10E-04	1.30E-06	2.20E-06	2.90E-05	1.30E-04	6.40E-05
CT Emissions	lb/yr	77E-02	1.1E-02	2.3E-03	2.4E-02	9.4E-02	2.5E-01	5.6E+00	1.0E-02	1.7E-02	2.8E-01	1.0E+00	5.0E-01
CT Emissions	Ton/Yr	3.4E-03	3.1E-01	5.0E-02	9.4E-02	2.5E-01	5.6E+00	1.0E-02	1.7E-02	2.8E-01	1.0E+00	5.0E-01	5.0E-01

Combustion Turbine CT2

CT Heat Input Rate	428	MMBtu/hr (LHV)											
Emission Factors - from Natural Gas-Fired Stationary Gas Turbines (lb/MMBtu)			1,3-Butadiene	Acetaldehyde	Acrolein	Benzene	Ethylbenzene	Formaldehyde	Naphthalene	PAH	Propylene Oxide	Toluene	Xylenes
Table 3.1-3			4.00E-05	6.40E-06	1.20E-05	1.20E-05	3.20E-05	7.10E-04	1.30E-06	2.20E-06	2.90E-05	1.30E-04	6.40E-05
CT Emissions	lb/yr	1.8E-04	1.7E-02	2.7E-03	5.1E-03	1.4E-02	3.0E-01	5.6E-04	9.4E-04	1.2E-02	5.6E-02	2.7E-02	1.1E-01
CT Emissions	Ton/Yr	8.1E-04	7.5E-02	1.2E-02	2.2E-02	6.0E-02	1.3E+00	2.4E-03	4.1E-03	5.4E-02	2.4E-01	1.2E-01	1.2E-01

Combustion Turbine CT3

CT Heat Input Rate	428	MMBtu/hr (LHV)											
Emission Factors - from Natural Gas-Fired Stationary Gas Turbines (lb/MMBtu)			1,3-Butadiene	Acetaldehyde	Acrolein	Benzene	Ethylbenzene	Formaldehyde	Naphthalene	PAH	Propylene Oxide	Toluene	Xylenes
Table 3.1-3			4.00E-05	6.40E-06	1.20E-05	1.20E-05	3.20E-05	7.10E-04	1.30E-06	2.20E-06	2.90E-05	1.30E-04	6.40E-05
CT Emissions	lb/yr	1.8E-04	1.7E-02	2.7E-03	5.1E-03	1.4E-02	3.0E-01	5.6E-04	9.4E-04	1.2E-02	5.6E-02	2.7E-02	1.1E-01
CT Emissions	Ton/Yr	8.1E-04	7.5E-02	1.2E-02	2.2E-02	6.0E-02	1.3E+00	2.4E-03	4.1E-03	5.4E-02	2.4E-01	1.2E-01	1.2E-01

Fuel Gas Heater H1

H1 Heat Input Rate	2.2	MMBtu/hr												
H1 Heat Input Unit	31.1	MMcf/yr												
Emission Factors - from Natural Gas Combustion (lb/MMBtu)			1,4-Dioxin											
Table 1.4-3			3.40E-03											
H1 Emissions	lb/yr	4.62E-03	1.05E-01											
H1 Emissions (limit)	Ton/Yr	2.02E-02	7.23E-01											
H1 Emissions (limit)	Ton/Yr	1.20E-02	4.28E-01											

Fuel Gas Heater H2

H2 Heat Input Rate	3.8	MMBtu/hr												
H2 Heat Input Unit	31.5	MMcf/yr												
Emission Factors - from Natural Gas Combustion (lb/MMBtu)			1,4-Dioxin											
Table 1.4-3			3.40E-03											
H2 Emissions	lb/yr	7.98E-03	2.05E-01											
H2 Emissions (limit)	Ton/Yr	3.50E-02	1.25E+00											
H2 Emissions (limit)	Ton/Yr	3.40E-02	1.21E+00											

Emergency Diesel Generator

EDG Heat Input Rate	3.4	MMBtu/hr											
Emission Factors for Large Uncontrolled Stationary Diesel Engines			1,3-Butadiene	Acetaldehyde	Acrolein	Benzene	Ethylbenzene	Formaldehyde	Naphthalene	PAH	Propylene Oxide	Toluene	Xylenes
Table 3.1-3			4.00E-05	6.40E-06	1.20E-05	1.20E-05	3.20E-05	7.10E-04	1.30E-06	2.20E-06	2.90E-05	1.30E-04	6.40E-05
EDG Emissions	lb/yr	2.44E-02	2.5E-02	4.0E-03	8.1E-03	2.2E-02	4.8E-01	1.0E-01	1.7E-02	2.7E-02	4.3E-01	1.6E-01	6.4E-01
EDG Emissions	Ton/Yr	5.60E-04	2.39E-04	2.39E-04	2.39E-04	2.39E-04	2.39E-04	2.39E-04	2.39E-04	2.39E-04	2.39E-04	2.39E-04	2.39E-04

Emergency Diesel Fire Pump

EDG Heat Input Rate	1.1	MMBtu/hr											
Emission Factors for Large Uncontrolled Stationary Diesel Engines			1,3-Butadiene	Acetaldehyde	Acrolein	Benzene	Ethylbenzene	Formaldehyde	Naphthalene	PAH	Propylene Oxide	Toluene	Xylenes
Table 3.1-3			4.00E-05	6.40E-06	1.20E-05	1.20E-05	3.20E-05	7.10E-04	1.30E-06	2.20E-06	2.90E-05	1.30E-04	6.40E-05
EDG Emissions	lb/yr	8.54E-04	3.05E-04	3.05E-04	3.05E-04	3.05E-04	3.05E-04	3.05E-04	3.05E-04	3.05E-04	3.05E-04	3.05E-04	3.05E-04
EDG Emissions	Ton/Yr	2.13E-05	7.73E-06	7.73E-06	7.73E-06	7.73E-06	7.73E-06	7.73E-06	7.73E-06	7.73E-06	7.73E-06	7.73E-06	7.73E-06

Facility Total

		1,3-Butadiene	Acetaldehyde	Acrolein	Benzene	Ethylbenzene	Formaldehyde	Naphthalene	PAH	Propylene Oxide	Toluene	Xylenes	Total HAPs
lb/yr	0.0	0.5	1.0E-01	1.7E-02	4.78E-02	8.5E-02	2.33E+00	7.7E-03	6.19E-03	7.7E-02	3.7E-01	1.70E-01	1.6
Ton/Yr	0.0	0.1	0.1	0.1	0.2	0.4	9.9	0.0	0.0	0.3	1.6	0.7	13.7

Emergency standby IC engine PTE Emissions Calculations:

**Table A.1 EMERGENCY STANDBY IC ENGINE HOURLY AND ANNUAL PTE FOR CRITERIA POLLUTANTS
WHEN COMBUSTING DIESEL FUEL**

Emissions Unit	Rated Output (bhp)	Annual Hours of Operation (hrs/yr) ¹	Criteria Pollutant	Emissions Factors (g/bhp-hr)	Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)
Emergency standby IC engine	755	500	PM ₁₀ ²	0.15	0.25	0.06
			SO ₂ ³	0.0055	0.01	0.00
			NO _x ²	4.8	7.99	2.00
			CO ²	2.6	4.33	1.08
			VOC ³	0.319	0.53	0.13

¹ – To be exempt from permit emergency IC engines are limited 500 hours per year for maintenance and testing (IDAPA 58.01.01222.01.d).

² – PM₁₀, NO_x, and CO emissions are taken from the manufacturer supplied EPA Tier 2 certification as supplied by the Applicant.

³ – Based on AP-42 Table 3.4-5 (10/96) for SO₂ (with a sulfur content of 0.0015% by weight for ULSD) and VOC.

Appendix B - Facility Comments for Draft Permit

The following comments were received from the facility on December 19, 2014:

Facility Comment: Does the 5 year stratification test apply to the NO_x RATA? Permit Condition 4.10 and 5.8 refers specifically to the CO RATA and it is not clear if the stratification test can also be valid for 5 years for the NO_x RATA.

DEQ Response: A clarification was added in Permit Conditions 4.6 and 5.5 regarding NO_x RATAs in accordance with 40 CFR Part 75.

Facility Comment: Permit Condition 5.7 refers to Permit Condition 3.25, however it seems like the intention might be to refer to Permit Condition 3.24.

DEQ Response: Permit Condition 5.7 has been revised to refer to Permit Condition 3.24.

Facility Comment: Permit Condition 7.2 seems to indicate that IPC needs to certify the emergency electric generator. Does this permit condition require additional testing beyond the testing completed by the manufacturer or that IPC comply with the manufacturer's emission-related instructions to maintain the manufacturer supplied certification?

DEQ Response: This permit condition does not require additional testing by IPC. This permit condition is taken from 40 CFR 60 Subpart IIII and requires that the engine be certified by the manufacturer to meet the emission standards for nonroad CI engines.