Statement of Basis

Tier I Operating Permit No. T1-2012.0051
Project ID 61097

University of Idaho
Moscow, Idaho

Facility ID 057-00025

Final

February 28, 2013
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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_2e	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
Rules	*Rules for the Control of Air Pollution in Idaho*
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

The University of Idaho (U of I) is an institution of higher education which conducts undergraduate and post graduate education and research, and is located at 1108 W. 6th St., Moscow, ID. The facility covers approximately 1,200 acres and is comprised of educational instruction buildings, research buildings, various student housing units, activity centers, and infrastructure to support day-to-day operations at U of I. 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 NO_X and CO above the major source threshold of 100 tons-per-year. HAPs emissions are below the major source thresholds of 10 tons per year for any one HAP and 25 tons per year for all HAPs combined.

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 U of I.

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.

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

Section 1 – Acronyms, Units, and Chemical Nomenclature

The Acronyms, Units, and Chemical Nomenclature section defines the abreviations used in the Statement of Basis and Tier Permit to Operate.

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 4 through 7 – Wood Waste-Fired Boiler (S-BA), Natural Gas-Fired Boilers (S-BB, S-BC, and S-BD), Diesel-Fired Emergency IC Engines (S-G01, S-G02, S-G03, S-G04, S-G05, and S-G06), and Gasoline Dispensing Operation

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 - 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

U of I's primary campus is located in Moscow, Idaho. The facility covers approximately 1,200 acres. The facility is comprised of educational instruction buildings, research buildings, various student housing units, activity centers, and infrastructure to support day-to-day operations at U of I.

The facility contains numerous individual buildings that house the instructional and research functions. Some buildings are equipped with domestic hot water heaters, small boilers, and small furnaces, which are generally fired on natural gas.

The most significant emissions sources at the facility are located in the power building, where the four main boilers provide steam for space heating during cold weather and space cooling through an absorption chiller system during the summer. Three of these boilers are fired exclusively on natural gas and the fourth boiler is fired on wood waste and a small amount of paper waste. The other significant sources at the facility are three diesel-fired emergency IC engines located at different buildings on the campus which are used for powering electrical generators during poweroutages.

3.2 Facility Permitting History

Tier I Operating Permit History - Previous 5-year permit term February 1, 2008 to September 25, 2012

The following information is the permitting history of this Tier I facility during the previous five-year permit term which was from February 1, 2008 to September 25, 2012. 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).

January 28, 2009	T1-2008.0167, Administrative Amendment to incorporate PTC P-2008.0079, issued September 4, 2008, Permit status (A) but will become (S) as a result of this project
February 1, 2008	T1-2007.0082, Tier I permit renewal, Permit status (S)

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).

January 28, 2009	Tier I permit No. T1-2008.0167 was issued as an Administrative Amendment to the Tier I operating permit to incorporate permit P-2008.0079, Permit status (A) but will become (S) as a result of this project
September 4, 2008	P-2008.0079, Conversion of an existing combination Tier II operating permit and PTC for the wood waste-fired boiler into a PTC only and obtaing a PTC for an existing inactive natural gas-fired boiler, Permit status (A)
February 1, 2008	Tier I permit No. T1-2007.0082 was issued as a renewal of the Tier I operating permit, Permit status (S)
June 30, 2006	Tier I permit No. T1-060203 was issued as an Administrative Amendment to the Tier I operating permit to change the responsible official for the facility, Permit status (S)
May 20, 2005	Tier I permit No. T1-050205 was issued as an Administrative Amendment to the Tier I operating permit to change the responsible official for the facility, Permit status (S)

September 2, 2004	Tier I permit No. T1-040207 was issued as an Administrative Amendment to the Tier I operating permit to change the responsible official for the facility and included other minor permit clarifications, Permit status (S)
July 28, 2003	Tier I permit No. T1-020208 was issued as an Administrative Amendment to correct a typographical error discovered by the U of I, Permit status (S)
November 18, 2002	Tier I permit No. 057-00025 was issued as the initial Title V permit to the facility, Permit status (S).
September 10, 2002	Tier II and PTC permit No. 057-00025 was issued to the facility, 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.

4.2 Application Chronology

July 30, 2012	DEQ received an application to renew the facility's effective Tier I operating permit.
August 29, 2012	DEQ determined that the application was incomplete.
September 4, 2012	DEQ received supplemental information from the applicant.
October 2, 2012	DEQ determined that the application was incomplete for second time.
October 9, 2012	DEQ received supplemental information from the applicant.
October 17, 2012	DEQ determined that the application was complete.
October 17, 2012	DEQ made available the draft permit and statement of basis for peer and regional office review.
November 5, 2012	DEQ made available the draft permit and statement of basis for applicant review.
Nov. 19 – Dec. 19, 2012	DEQ provided a public comment period on the proposed action.
December 26, 2012	DEQ provided the proposed permit and statement of basis for EPA review.
February 28, 2013	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.

No changes have occurred at the facility during the previous five years that would increase the facility's emissions compared to the previous Tier I operating permit term.

5.1 Process No. 1 – WOOD WASTE-FIRED BOILER (S-BA)

Table 5.1 lists the emissions units and control devices associated with the Wood Waste-Fired Boiler (S-BA).

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.
S-BA	Wood waste-fired boiler	Multiclone	Exhaust stack S-BA

The primary purpose of the wood waste-fired boiler, identified as S-BA, is to produce steam for heating the campus in winter and to provide steam to absorption chillers to cool the campus buildings in summer. This boiler is also allowed to burn a small amount of paper waste.

5.2 Process No. 2 – NATURAL GAS-FIRED BOILERS (S-BB, S-BC, AND S-BD)

Table 5.2 lists the emissions units and control devices associated with the Natural Gas-Fired Boilers (S-BB, S-BC, and S-BD).

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.
S-BB	Natural gas-fired boiler	N/A	Exhaust stack S-BB
S-BC	Natural gas-fired boiler	N/A	Exhaust stack S-BC
S-BD	Natural gas-fired boiler	N/A	Exhaust stack S-BD

The primary purpose of the three natural gas-fired boilers, identified as S-BB, S-BC, and S-BD, is to produce steam for heating the campus buildings in winter and to provide steam to absorption chillers to cool the campus buildings in summer in the event the wood waste-fired boiler is shut down or cannot supply the desired quantity of steam for the facility.

5.3 Process No. 3 – DIESEL-FIRED EMERGENCY IC ENGINES (S-G01, S-G02, S-G03, S-G04, S-G05, AND S-G06)

Table 5.3 lists the emissions units and control devices associated with Diesel-Fired Emergency IC Engines (S-G01, S-G02, S-G03, S-G04, S-G05, and S-G06).

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.
S-G01	Diesel-fired emergency IC engine	N/A	Exhaust stack S-G01
S-G02	Diesel-fired emergency IC engine	N/A	Exhaust stack S-G02
S-G03	Diesel-fired emergency IC engine	N/A	Exhaust stack S-G03
S-G04*	Diesel-fired emergency IC engine	N/A	Exhaust stack S-G05
S-G05*	Diesel-fired emergency IC engine	N/A	Exhaust stack S-G06
S-G06*	Diesel-fired emergency IC engine	N/A	Exhaust stack S-G07

*Note: Emergency IC engines S-G04, S-G05, and S-G06 were installed during the previous Tier I permit term. These emissions units were exempt from obtaining a Permit to Construct prior to installation. Therefore, they are included in the renewed Tier I permit with the only permit conditions being required new Federal NSPS/NESHAP requirements.

The primary purpose of the six diesel-fired emergency IC engines powering electrical generators, identified as S-G01, S-G02, S-G03, S-G04, S-G05, and S-G06, is to produce electricity for the facility in the event of disruption of electricity to the facility from the power grid.

5.4 Process No. 4 – GASOLINE DISPENSING OPERATION

Table 5.4 lists the emissions units and control devices associated with the Gasoline Dispensing Operation.

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.
N/A*	Gasoline Dispensing Operation	N/A	N/A

*Note: The Gasoline Dispensing Operation was installed prior to 2000 (before the facility received their air permit). Therefore, it is included in the renewed Tier I permit with the only permit conditions being required new Federal NSPS/NESHAP requirements.

The primary purpose of the gasoline dispensing operation is to dispense gasoline into motor vehicles, heavy equipment, lawn equipment, and portable gasoline cans at the facility.

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 5.4 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
Storage tanks less than 260 gallons storage capacity	1
Storage tanks containing VOC products less than 10,000 gallons storage capacity	3
Natural gas-fired emergency generators less than 5 MMBtu/hr heat input	5
Gasoline-fired emergency generator of less than 0.5 MMBtu/hr and fuel less than 1.0 weight percent sulfur	6
Biofuels test engines of less than 0.5 MMBtu/hr and fuel less than 1.0 weight percent sulfur	6
Small emergency generators	7
Printing and silk-screening activities	12
Water chlorination facilities less than 20 MMGal/day	16
Paint booths less than two gallons per day	17
Small boilers less than 5MMBtu/hr	18
Domestic hot water heaters less than 5 MMBtu/hr	18
Small space heating furnaces less than 5 MMBtu/hr	18
Smokehouses under twenty square feet	21
Treated wastewater effluent chlorination facility less than 1 MMGal/day	28
Incinerators	30
Indoor firing range	30
Gas storage area and gas cabinets	30
Indoor swimming pool	30
Space heating boiler – Holm Research Center	30
Space heating boiler – Dairy milk parlor/barn	30
Space heating boiler – Martin lab	30
Space heating boiler - Aquaculture Institute	30
Space heating boiler – Kibbie Dome	30
Space heating boiler – President's residence	30
Space heating boiler – Kibbie east end addition	30
Space heating boiler – Dairy milk parlor /barn	30
Space heating boiler – Campus police station	30
Space heating boiler – Targhee Hall	30
Space heating furnace – Holm Research Center – 3	30
Space heating furnace - Holm Research Canter – 4	30

Table 5.5 INSIGNIFICANT EMISSION UNITS AND REGULATORY AUTHORITY/JUSTIFICATION (continued)

Emissions Unit / Activity	Regulatory Authority / Justification
Space heating furnace – Yard 1 storage	30
Space heating furnace – U of I Foundation Office	30
Space heating furnace – Meat lab/pavilion – 2	30
Space heating furnace – Targhee Hall	30
Space heating furnace – Business tech incubator	30
Space heating furnace - North Campus Center - 4	30
Space heating furnace – Human Resources	30
Space heating furnace – Industrial Education – 2	30
Space heating furnace – North Campus Center – 1	30
Space heating furnace – Motor pool/garage –2	30
Space heating furnace – Industrial Education – 7	30
Space heating furnace – Golf course club house	30
Space heating furnace - Meat lab/pavilion – 1	30
Space heating furnace – Industrial Education – 5	30
Space heating furnace – North Campus Center – 3	30
Space heating furnace – Golf course club house	30
Space heating furnace – Industrial Education – 4	30
Space heating furnace – Ag publications	30
Space heating furnace – Motor pool/garage - 3	30
Space heating furnace – Ag Engineering Office	30
Space heating furnace – Bookstore – 3	30
Space heating furnace – Aquaculture lab - 2	30
Space heating furnace – Hemo-Parasitic barn	30
Space heating furnace – North Campus Center - 3	30
Space heating furnace – Motor pool/garage – 4 (8 Units)	30
Space heating furnace – Sheep house	30
Space heating furnace – Family housing –2 (7 Units)	30
Space heating furnace – Business tech incubator	30
Space heating furnace – Industrial Education – 3	30
Space heating furnace – Bookstore – 2	30
Space heating furnace – North Campus Center – 5	30
Space heating furnace – Family housing - 3	30
Space heating furnace – Dairy house	30
Space heating furnace – Beef house	30
Space heating furnace – Business tech incubator (9 Units)	30
Space heating furnace – Bookstore – 1	30
Space heating furnace – Family housing group (108 Units)	30
Space heating furnace – Motor pool/garage –1	30
Space heating furnace – Domestic water system pump house	30
Space heating furnace – Aquaculture lab – 1	30
Space heating furnace – Industrial Education –1	30
Water heater - Kibbie east end addition	30
Water heater - Holm Research	30
Water heater - Meats lab – 1	30
Water heater - Meats lab – 2	30
Water heater – Targhee Hall	30
Water heater – Martin lab	30
Water heater – Dairy milking parlor	30
Water heater – President's residence	30
Water heater – Family housing (108 Units)	30
Incinerator burners – Life Science North	30
Incinerator burners – Holm Research	30
Emergency generator – College of Forestry	30
Emergency generator – Theophilus Tower	30
Emergency generator – Administration	30
Emergency generator – McConnell Hall	30
Emergency generator – Student Union Building	30
Emergency generator – Engineering/Physics	30
Biofuels test engines – Engineering Isotopes Lab (3 Engines)	30

5.6 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)[1]

Source Description	PM_{10}	NO_X	SO_2	CO	VOC	HAP	GHG CO_2e^2
	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr
Wood waste-fired boiler (S-BA)	32.18	66.45	9.68	25.19	6.58	14.78	7,247
Natural gas-fired boiler (S-BB)	2.44	31.92	0.20	26.84	1.76	0.60	
Natural gas-fired boiler (S-BC)	2.58	33.74	0.21	28.37	1.86	0.64	
Natural gas-fired boiler (S-BD)	1.35	17.58	0.11	14.78	0.97	0.33	
Diesel-fired emergency IC engine (S-G01)	0.29	4.08	0.27	0.88	0.33	0.01	144
Diesel-fired emergency IC engine (S-G02)	0.16	2.21	0.15	0.48	0.18	0.00	70
Diesel-fired emergency IC engine (S-G03)	0.36	5.18	0.34	1.12	0.42	0.01	217
Diesel-fired emergency IC engine (S-G04)	0.38	5.39	0.35	1.16	0.44	0.01	97
Diesel-fired emergency IC engine (S-G05)	0.19	2.71	0.18	0.58	0.22	0.00	149
Diesel-fired emergency IC engine (S-G06)	0.28	3.92	0.26	0.85	0.32	0.01	142
Gasoline dispensing	0.0	0.0	0.0	0.0	1.59	0.0	0.0
Insignificant Sources	2.06	32.34	0.60	17.63	5.06	0.27	0.0
Paved/Unpaved Road Fugitive Sources	32.01	0.0	0.0	0.0	0.0	0.0	0.0
Paved/Unpaved Parking Lot Fugitive Sources	8.63	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous Fugitive Sources	3.78	0.0	0.0	0.0	0.0	0.0	0.0
Total Emissions	**86.69**	**205.52**	**12.35**	**117.88**	**19.73**	**16.66**	**8,066**

[1]Note: The emissions inventory was provided by the Applicant in some cases does not match the emissions limits specified in the permit. As this is a Tier 1 renewal permitting action the emissions inventory discrepancies was not addressed at this time.

[2]GHG gas emissions for the emergency IC engines were not provided by the Applicant. Therefore, they were calculated using the emission factor of 1.16 lb-CO_2e/bhp-hr found in AP-42, Table 3.4-1, for diesel-fired IC engines and assumed operation of 500 hrs/yr.

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;
- Wood Waste-Fired Boiler (S-BA) Emissions Limits;
- Natural Gas-Fired Boilers (S-BB, S-BC, and S-BD) Emissions Limits;
- Diesel-Fired Emergecy IC Engines (S-G01, S-G02, S-G03, S-G04, S-G05, and S-G06) Emissions Limits;
- Gasoline Dispensing Operation 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

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)]

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 Subpart IIII and NESHAP Subparts ZZZZ, CCCCCC, and JJJJJJ, 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 3.28 - 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 3.28)

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.

6.2 Emissions Unit-Specific Emissions Limits and MRR

Emissions Unit No. 1: Wood Waste-Fired Boiler (S-BA)

Permit Condition 4.1, PM_{10}, NO_X, and CO Emissions Limits, obtained from PTC No. P-2008.0079, issued 9/4/2008

Emissions of PM_{10}, NO_X, and CO shall not exceed any of the following limits:

- 17.24 lb-PM_{10}/hr, 75.52 T-PM_{10}/yr
- 15.17 lb-NO_X/hr, 71.63 T-NO_X/yr
- 5.75 lb-CO/hr, 164.00 T-CO/yr

MRRR - (Permit Conditions 4.4, 4.5, 4.6, 4.7, 4.16, 4.17, 4.18, 4.19, 4.20, 4.21, 4.22 and 4.26)

The Permittee is required to ensure through monitoring that:

- The maximum wood-waste boiler steam production rate does not exceed an average of 66,800 lb/hr, based upon a three-hour rolling average (with an allowance to increase the steam production rate based upon source testing).

- The wood waste-fired boiler burns wood fuel or a mixture of 99.5% wood and 0.5% paper-derived fuel based on volume (on a rolling 12-month basis). And also that the boiler does not combust any contaminated wood fuels such as railroad ties, orientated strand board, particle board, plywood, painted or stained woods.
- The multiclone be operated when the wood-waste boiler is operating, within the O&M Manual specified pressure operating ranges, and that routine maintenance be performed per the O&M Manual.
- The Permitee maintains an Operation and Maintenance (O&M) Manual for the multiclone with certain minimum required information.

The permittee is required to record the wood-waste boiler steaming rate, the multiclone pressure drop, when the multiclone pressure drop exceeds the required ranges and how this excusion in operation is dealt with, how to deal with the CAM parameters, the volume of paper-derived fuel (on days when this fuel is utilized in the wood-waste boiler), the calculated boiler PM_{10}, CO, and NO_X emissions rates, and the measured CAM parameters.

Permit Condition 4.2, Grain Loading Limit – IDAPA 58.01.01.676

The Permittee shall ensure that particulate matter (PM) emissions from the wood waste-fired boiler stack do not exceed 0.080 gr/dscf of effluent gas adjusted to 8% oxygen by volume.

MRRR - (Permit Conditions 4.23 and 4.24)

Performance testing, as well as recordkeeping of the operating parameters during the test, is required at least once every five years to determine compliance with the grain loading standard.

Permit Condition 4.3, Opacity Limit – IDAPA 58.01.01.625

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.

MRRR - (Permit Conditions 4.15 and 4.25)

The Permittee is required to operate a COMS to measure opacity in the wood-waste boiler exhaust stack and continuously record these opacity measurements.

Emissions Unit No. 2: Natural Gas-Fired Boilers (S-BB, S-BC, and S-BD)

Permit Condition 5.1 - PM_{10}, SO_2, NO_X, CO, and VOC Emissions Limits, obtained from PTC No. P-2008.0079, issued 9/4/2008

Emissions of PM_{10}, SO_2, NO_X, CO, and VOC shall not exceed any of the following limits for Boiler S-BB:

- 0.62 lb-PM_{10}/hr, 1.54 T-PM_{10}/yr
- 0.05 lb-SO_2/hr, 0.12 T- SO_2/yr
- 8.09 lb-NO_X/hr, 20.22 T-NO_X/yr
- 6.80 lb-CO/hr, 16.99 T-CO/yr
- 0.45 lb-VOC/hr, 1.11 T-VOC/yr

Emissions of PM_{10}, SO_2, NO_X, CO, and VOC shall not exceed any of the following limits for Boiler S-BC:

- 0.59 lb-PM_{10}/hr, 1.46 T-PM_{10}/yr
- 0.05 lb-SO_2/hr, 0.12 T- SO_2/yr
- 7.70 lb-NO_X/hr, 19.26 T-NO_X/yr

- 6.48 lb-CO/hr, 16.18 T-CO/yr
- 0.42 lb-VOC/hr, 1.06 T-VOC/yr

Emissions of PM_{10}, SO_2, NO_X, CO, and VOC shall not exceed any of the following limits for Boiler S-BD:

- 0.32 lb-PM_{10}/hr, 0.80 T-PM_{10}/yr
- 0.03 lb-SO_2/hr, 0.06 T- SO_2/yr
- 4.20 lb-NO_X/hr, 10.51 T-NO_X/yr
- 3.53 lb-CO/hr, 8.83 T-CO/yr
- 0.23 lb-VOC/hr, 0.58 T-VOC/yr

MRRR - (Permit Conditions 5.4 and 5.7)

The Permittee is required to ensure that natural gas input to the three boilers combined, designated as S-BB, S-BC, and S-BD, does not exceed 1,000 MMscf in any consecutive 12-month period. In addition, records of natural gas input to the three boilers on a monthly basis are required.

Permit Condition 5.2, Grain Loading Limit – IDAPA 58.01.01.676

The Permittee shall ensure that particulate matter (PM) emissions from the the three boilers, designated as S-BB, S-BC, or S-BD, exhaust stacks do not exceed 0.015 gr/dscf of effluent gas adjusted to 3% oxygen by volume.

MRRR - (Permit Conditions 5.5)

No compliance demonstration is required for the three boilers, designated as S-BB, S-BC, or S-BD, for the purpose of establishing compliance with the grain-loading standard because the three boilers are required to combust natural gas exclusively. The combustion of natural ensures that PM emissions from the stacks of the boilers will not exceed 0.080 gr/dscf.

Permit Condition 5.3, Opacity Limit – IDAPA 58.01.01.625

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.

MRRR - (Permit Conditions 5.6)

No compliance demonstration is required for the three boilers, designated as S-BB, S-BC, or S-BD, for the purpose of establishing compliance with the opacity limit because the three boilers are required to combust natural gas exclusively. The combustion of natural gas ensures that there will be no visible emissions from the stacks of the boilers.

Emissions Unit No. 3: Diesel-Fired Emergency IC Engines (S-G01, S-G02, S-G03, S-G04, S-G05, and S-G06)

Permit Condition 6.1 - PM_{10}, SO_2, NO_X, CO, and VOC Emissions Limits, obtained from PTC No. P-2008.0079, issued 9/4/2008

Emissions of PM_{10}, SO_2, NO_X, CO, and VOC shall not exceed any of the following limits for Boiler S-G01:

- 1.15 lb-PM_{10}/hr, 0.29 T-PM_{10}/yr
- 1.07 lb-SO_2/hr, 0.27 T- SO_2/yr
- 16.23 lb-NO_X/hr, 4.08 T-NO_X/yr
- 3.52 lb-CO/hr, 0.88 T-CO/yr

- 1.33 lb-VOC/hr, 0.33 T-VOC/yr

Emissions of PM_{10}, SO_2, NO_X, CO, and VOC shall not exceed any of the following limits for Boiler S-G02:

- 1.02 lb-PM_{10}/hr, 0.26 T-PM_{10}/yr
- 0.96 lb-SO_2/hr, 0.24 T- SO_2/yr
- 14.55 lb-NO_X/hr, 3.64 T-NO_X/yr
- 3.14 lb-CO/hr, 0.78 T-CO/yr
- 1.19 lb-VOC/hr, 0.30 T-VOC/yr

Emissions of PM_{10}, SO_2, NO_X, CO, and VOC shall not exceed any of the following limits for Boiler S-G03:

- 1.46 lb-PM_{10}/hr, 0.36 T-PM_{10}/yr
- 1.36 lb-SO_2/hr, 0.34 T- SO_2/yr
- 20.73 lb-NO_X/hr, 5.18 T-NO_X/yr
- 4.47 lb-CO/hr, 1.12 T-CO/yr
- 1.69 lb-VOC/hr, 0.42 T-VOC/yr

MRRR - (Permit Conditions 6.3 and 6.16)

The Permittee is required to ensure that the three emergency IC engines, designated as S-G01, S-G02, and S-G03, not operate more than 500 hours in any consecutive 12-month period. In addition, the Permittee is required to maintain records of operation on a monthly basis.

Permit Condition 6.2, Opacity Limit – IDAPA 58.01.01.625

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.

MRRR - (Permit Conditions 3.8, 3.9)

The Permittee is required to perform a monthly facility-wide inspection of potential sources of visible emissions as well as maintain records of the results of each visible emission inspection and each opacity test when conducted.

Emissions Unit No. 4: Gasoline Dispensing Operation

The only applicable requirements to the gasoline dispensing operation are from NESHAP Subpart CCCCCC. Therefore, there are no requirements to discuss as specific emissions limits and MRRR for the gasoline dispensing 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 with IDAPA 58.01.01.01, 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 Latah county which is designated as attainment or unclassifiable for PM_{10}, $PM_{2.5}$, CO, NO_2, SO_x, and Ozone. Reference 40 CFR 81.313.

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

Post project facility-wide emissions from this facility have a potential to emit greater than 100 tons per year for NO_X and CO as demonstrated previously in the Emissions Inventories Section of this analysis. HAPs emissions are below the major source thresholds of 10 tons per year for any one HAP and 25 tons per year for all HAPs combined. Therefore, this facility is classified as a major facility, as defined in IDAPA 58.01.01.008.10, as is subject to Tier I permitting requirements.

7.3 PSD Classification (40 CFR 52.21)

Post project facility-wide emissions from this facility do not have a potential to emit greater than 250 tons per year for an criteria pollutant as demonstrated previously in the Emissions Inventories Section of this analysis. Therefore, this facility is not classified as a major stationary source, as defined in 40 CFR 52.21(b)(1), and is not subject to PSD permitting requirements.

7.4 NSPS Applicability (40 CFR 60)

Because the facility has two small unpermitted waste incinerators, a wood waste-fired boiler, three natural gas-fired boilers rated at greater than 10 MMBtu/hr (but less than 100 MMBtu/hr) and three new compression ignition IC engines powering electrical generators (S-G04, S-G05, and S-G06) the following NSPS requirements may apply to this facility:

- 40 CFR 60, Subpart Ce - Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators
- 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
- 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

40 CFR 60, Subpart Ce **Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators**

§ 60.32e Designated facilities

Section (a) states that except as provided in paragraphs (b) through (h) of this section, the designated facility to which the guidelines apply is each individual HMIWI:

(1) For which construction was commenced on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998.

(2) For which construction was commenced after June 20, 1996 but no later than December 1, 2008, or for which modification is commenced after March 16, 1998 but no later than April 6, 2010.

Section (b) states that a combustor is not subject to this subpart during periods when only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste (all defined in §60.51c) is burned, provided the owner or operator of the combustor:

(1) Notifies the Administrator of an exemption claim; and

(2) Keeps records on a calendar quarter basis of the periods of time when only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste is burned.

Section (c) states that any co-fired combustor (defined in §60.51c) is not subject to this subpart if the owner or operator of the co-fired combustor:

(1) Notifies the Administrator of an exemption claim;

(2) Provides an estimate of the relative weight of hospital waste, medical/infectious waste, and other fuels and/or wastes to be combusted; and

(3) Keeps records on a calendar quarter basis of the weight of hospital waste and medical/infectious waste combusted, and the weight of all other fuels and wastes combusted at the co-fired combustor.

The University of Idaho has two waste incinerators that could co-combust hospital and medical/infectious waste and has filed an exemption claim with DEQ. Records are kept for the type and amount of waste combusted on a quarterly basis. Therefore, no further discussion is required.

40 CFR 60, Subpart Dc **Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units**

§ 60.40c Applicability and delegation of authority.

As stated in Section (a), except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr). The four boilers installed at this facility are all rated at greater than 10 MMBtu/hr and less than 100 MMBtu/hr but were all installed prior to June 9, 1989. Therefore, the four boilers installed at this facility are not affected units because they are steam generating units that all commenced construction prior to June 9, 1989.

In addition, Section 60.14 defines a modification as: (a) Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere. The four boilers installed at this facility have no proposed increases in emissions and are not being "modified" as a result of this Tier I permit renewal. Therefore, Subpart Dc does not apply to the four boilers installed at this facility.

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

§ 60.4200 Am I subject to this subpart?

Section (a) specifies that the provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) 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.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

(i) 2007 or later, for engines that are not fire pump engines;

(ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines.

(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 any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any 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.

(e) Owners and operators of facilities with CI ICE that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate non-road engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

The Applicant has three newly installed emergency IC engines (S-G04, S-G05, and S-G06) that were installed/constructed after July 11, 2005. Therefore, this subpart is applicable to the three newly installed emergency IC engines S-G04, S-G05, and S-G06 at this facility.

§ 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?

Section (a) specifies that owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to this subpart. Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

(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 three newly installed emergency IC engines (S-G04, S-G05, and S-G06) are Tier 3 certified engines which meet these emissions requirements. This requirement is assured by Permit Condition 6.4.

§ 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 over the entire life of the engine.

This requirement is assured by Permit Condition 6.5 for emergency IC engines S-G04, S-G05, and S-G06.

§ 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?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(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 purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel.

§ 80.510 What are the standards and marker requirements for NRLM diesel fuel and ECA marine fuel?

(b) Beginning June 1, 2010 . Except as otherwise specifically provided in this subpart, all NR and LM diesel fuel is subject to the following per-gallon standards:

(1) Sulfur content.

(i) 15 ppm maximum for NR diesel fuel.

(ii) 500 ppm maximum for LM diesel fuel.

This requirement is assured by Permit Conditions 6.6 and 6.12 for emergency IC engines S-G04, S-G05, and S-G06.

§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

This requirement is assured by Permit Condition 6.7 for emergency IC engines S-G04, S-G05, and S-G06.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 kW (25 hp) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 kW (25 hp) and less than 56 kW (75 hp) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 kW (75 hp) and less than 130 kW (175 hp) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 kW (175 hp), including those above 560 kW (750 hp), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 kW (750 hp) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) After December 31, 2018, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 600 kW (804 hp) and less than 2,000 kW (2,680 hp) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.

(h) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.

(i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

The Applicant has installed Tier 3 certified engines (S-G04, S-G05, and S-G06). These requirements are assured by Permit Condition 6.4.

§ 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.

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. Emergency IC engines S-G04, S-G05, and S-G06 are not equipped with diesel particulate filters.

These requirements are assured by Permit Condition 6.8 for emergency IC engines S-G04, S-G05, and S-G06.

§ 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.

These requirements are assured by Permit Conditions 6.9 and 6.13 for emergency IC engines S-G04, S-G05, and S-G06.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.

The Applicant has installed three post 2007 model year stationary CI internal combustion engines. Therefore, these requirements are not applicable and no further discussion is required.

(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 emission-related specifications, except as permitted in paragraph (g) of this section.

The Applicant has installed three Tier 3 certified IC engines and has had them installed and configured properly. Therefore, these requirements are not applicable and no further discussion is required.

(d) If you are an owner or operator and must comply with the emission standards specified in §60.4204(c) or §60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.

(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213.

(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

(i) Identification of the specific parameters you propose to monitor continuously;

(ii) A discussion of the relationship between these parameters and NO_X and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NO_X and PM emissions;

(iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in §60.4213.

The Applicant has installed three Tier 3 certified IC engines. Therefore, these requirements are not applicable and no further discussion is required.

(e) If you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(e) or §60.4205(f), you must demonstrate compliance according to one of the methods specified in paragraphs (e)(1) or (2) of this section.

(1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in §60.4204(e) or §60.4205(f), as applicable.

(2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in §60.4212 or §60.4213, as appropriate. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

The Applicant has installed three Tier 3 certified IC engines. Therefore, these requirements are not applicable and no further discussion is required.

(f) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. 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 year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

These requirements are assured by Permit Conditions 6.10 and 6.14 for emergency IC engines S-G04, S-G05, and S-G06.

(g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

(1) If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

(2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

(3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

These requirements are assured by Permit Condition 6.11 for emergency IC engines S-G04, S-G05, and S-G06.

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

(a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.

(1) Submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.

(i) Name and address of the owner or operator;

(ii) The address of the affected source;

(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment; and

(v) Fuel used.

(2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

(i) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(ii) Maintenance conducted on the engine.

(iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

(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.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached. The following table applies:

You must comply with the labeling requirements in §60.4210(f) and the recordkeeping requirements in §60.4214(b) for new emergency stationary CI ICE beginning in the following model years:

Table 7 - Table 5 to Subpart IIII of Part 60—Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

Engine power	Starting model year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

These requirements are assured by Permit Condition 6.16 for emergency IC engines S-G04, S-G05, and S-G06.

7.5 NESHAP Applicability (40 CFR 61)

The following NESHAP requirement applies to this facility:

- 40 CFR 61, Subpart M – National Emissions Standard for Asbestos

§ 61.145 Standards for demolition and renovation

(a) *Applicability.* To determine which requirements of paragraphs (a), (b), and (c) of this section apply to the owner or operator of a demolition or renovation activity and prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable ACM. The requirements of paragraphs (b) and (c) of this section apply to each owner or operator of a demolition or renovation activity, including the removal of RACM as follows:

(1) In a facility being demolished, all the requirements of paragraphs (b) and (c) of this section apply, except as provided in paragraph (a)(3) of this section, if the combined amount of RACM is

(i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or

(ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.

(2) In a facility being demolished, only the notification requirements of paragraphs (b)(1), (2), (3)(i) and (iv), and (4)(i) through (vii) and (4)(ix) and (xvi) of this section apply, if the combined amount of RACM is

(i) Less than 80 linear meters (260 linear feet) on pipes and less than 15 square meters (160 square feet) on other facility components, and

(ii) Less than one cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously or there is no asbestos.

(3) If the facility is being demolished under an order of a State or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse, only the requirements of paragraphs (b)(1), (b)(2), (b)(3)(iii), (b)(4) (except (b)(4)(viii)), (b)(5), and (c)(4) through (c)(9) of this section apply.

(4) In a facility being renovated, including any individual nonscheduled renovation operation, all the requirements of paragraphs (b) and (c) of this section apply if the combined amount of RACM to be stripped, removed, dislodged, cut, drilled, or similarly disturbed is

(i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or

(ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.

(iii) To determine whether paragraph (a)(4) of this section applies to planned renovation operations involving individual nonscheduled operations, predict the combined additive amount of RACM to be removed or stripped during a calendar year of January 1 through December 31.

(iv) To determine whether paragraph (a)(4) of this section applies to emergency renovation operations, estimate the combined amount of RACM to be removed or stripped as a result of the sudden, unexpected event that necessitated the renovation.

(5) Owners or operators of demolition and renovation operations are exempt from the requirements of §§61.05(a), 61.07, and 61.09.

(b) *Notification requirements*. Each owner or operator of a demolition or renovation activity to which this section applies shall:

(1) Provide the Administrator with written notice of intention to demolish or renovate. Delivery of the notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(2) Update notice, as necessary, including when the amount of asbestos affected changes by at least 20 percent.

(3) Postmark or deliver the notice as follows:

(i) At least 10 working days before asbestos stripping or removal work or any other activity begins (such as site preparation that would break up, dislodge or similarly disturb asbestos material), if the operation is described in paragraphs (a) (1) and (4) (except (a)(4)(iii) and (a)(4)(iv)) of this section. If the operation is as described in paragraph (a)(2) of this section, notification is required 10 working days before demolition begins.

(ii) At least 10 working days before the end of the calendar year preceding the year for which notice is being given for renovations described in paragraph (a)(4)(iii) of this section.

(iii) As early as possible before, but not later than, the following working day if the operation is a demolition ordered according to paragraph (a)(3) of this section or, if the operation is a renovation described in paragraph (a)(4)(iv) of this section.

(iv) For asbestos stripping or removal work in a demolition or renovation operation, described in paragraphs (a) (1) and (4) (except (a)(4)(iii) and (a)(4)(iv)) of this section, and for a demolition described in paragraph (a)(2) of this section, that will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator as follows:

(A) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin after the date contained in the notice,

(1) Notify the Administrator of the new start date by telephone as soon as possible before the original start date, and

(2) Provide the Administrator with a written notice of the new start date as soon as possible before, and no later than, the original start date. Delivery of the updated notice by the U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(B) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin on a date earlier than the original start date,

(1) Provide the Administrator with a written notice of the new start date at least 10 working days before asbestos stripping or removal work begins.

(2) For demolitions covered by paragraph (a)(2) of this section, provide the Administrator written notice of a new start date at least 10 working days before commencement of demolition. Delivery of updated notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(C) In no event shall an operation covered by this paragraph begin on a date other than the date contained in the written notice of the new start date.

(4) Include the following in the notice:

(i) An indication of whether the notice is the original or a revised notification.

(ii) Name, address, and telephone number of both the facility owner and operator and the asbestos removal contractor owner or operator.

(iii) Type of operation: demolition or renovation.

(iv) Description of the facility or affected part of the facility including the size (square meters [square feet] and number of floors), age, and present and prior use of the facility.

(v) Procedure, including analytical methods, employed to detect the presence of RACM and Category I and Category II nonfriable ACM.

(vi) Estimate of the approximate amount of RACM to be removed from the facility in terms of length of pipe in linear meters (linear feet), surface area in square meters (square feet) on other facility components, or volume in cubic meters (cubic feet) if off the facility components. Also, estimate the approximate amount of Category I and Category II nonfriable ACM in the affected part of the facility that will not be removed before demolition.

(vii) Location and street address (including building number or name and floor or room number, if appropriate), city, county, and state, of the facility being demolished or renovated.

(viii) Scheduled starting and completion dates of asbestos removal work (or any other activity, such as site preparation that would break up, dislodge, or similarly disturb asbestos material) in a demolition or renovation; planned renovation operations involving individual nonscheduled operations shall only include the beginning and ending dates of the report period as described in paragraph (a)(4)(iii) of this section.

(ix) Scheduled starting and completion dates of demolition or renovation.

(x) Description of planned demolition or renovation work to be performed and method(s) to be employed, including demolition or renovation techniques to be used and description of affected facility components.

(xi) Description of work practices and engineering controls to be used to comply with the requirements of this subpart, including asbestos removal and waste-handling emission control procedures.

(xii) Name and location of the waste disposal site where the asbestos-containing waste material will be deposited.

(xiii) A certification that at least one person trained as required by paragraph (c)(8) of this section will supervise the stripping and removal described by this notification. This requirement shall become effective 1 year after promulgation of this regulation.

(xiv) For facilities described in paragraph (a)(3) of this section, the name, title, and authority of the State or local government representative who has ordered the demolition, the date that the order was issued, and the date on which the demolition was ordered to begin. A copy of the order shall be attached to the notification.

(xv) For emergency renovations described in paragraph (a)(4)(iv) of this section, the date and hour that the emergency occurred, a description of the sudden, unexpected event, and an explanation of how the event caused an unsafe condition, or would cause equipment damage or an unreasonable financial burden.

(xvi) Description of procedures to be followed in the event that unexpected RACM is found or Category II nonfriable ACM becomes crumbled, pulverized, or reduced to powder.

(xvii) Name, address, and telephone number of the waste transporter.

(5) The information required in paragraph (b)(4) of this section must be reported using a form similiar to that shown in Figure 3.

(c) *Procedures for asbestos emission control.* Each owner or operator of a demolition or renovation activity to whom this paragraph applies, according to paragraph (a) of this section, shall comply with the following procedures:

(1) Remove all RACM from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. RACM need not be removed before demolition if:

(i) It is Category I nonfriable ACM that is not in poor condition and is not friable.

(ii) It is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition; or

(iii) It was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and adequately wet at all times until disposed of.

(iv) They are Category II nonfriable ACM and the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition.

(2) When a facility component that contains, is covered with, or is coated with RACM is being taken out of the facility as a unit or in sections:

(i) Adequately wet all RACM exposed during cutting or disjoining operations; and

(ii) Carefully lower each unit or section to the floor and to ground level, not dropping, throwing, sliding, or otherwise damaging or disturbing the RACM.

(3) When RACM is stripped from a facility component while it remains in place in the facility, adequately wet the RACM during the stripping operation.

(i) In renovation operations, wetting is not required if:

(A) The owner or operator has obtained prior written approval from the Administrator based on a written application that wetting to comply with this paragraph would unavoidably damage equipment or present a safety hazard; and

(B) The owner or operator uses of the following emission control methods:

(1) A local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping and removal of the asbestos materials. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in §61.152.

(2) A glove-bag system designed and operated to contain the particulate asbestos material produced by the stripping of the asbestos materials.

(3) Leak-tight wrapping to contain all RACM prior to dismantlement.

(ii) In renovation operations where wetting would result in equipment damage or a safety hazard, and the methods allowed in paragraph (c)(3)(i) of this section cannot be used, another method may be used after obtaining written approval from the Administrator based upon a determination that it is equivalent to wetting in controlling emissions or to the methods allowed in paragraph (c)(3)(i) of this section.

(iii) A copy of the Administrator's written approval shall be kept at the worksite and made available for inspection.

(4) After a facility component covered with, coated with, or containing RACM has been taken out of the facility as a unit or in sections pursuant to paragraph (c)(2) of this section, it shall be stripped or contained in leak-tight wrapping, except as described in paragraph (c)(5) of this section. If stripped, either:

(i) Adequately wet the RACM during stripping; or

(ii) Use a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in §61.152.

(5) For large facility components such as reactor vessels, large tanks, and steam generators, but not beams (which must be handled in accordance with paragraphs (c)(2), (3), and (4) of this section), the RACM is not required to be stripped if the following requirements are met:

(i) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM.

(ii) The component is encased in a leak-tight wrapping.

(iii) The leak-tight wrapping is labeled according to §61.149(d)(1)(i), (ii), and (iii) during all loading and unloading operations and during storage.

(6) For all RACM, including material that has been removed or stripped:

(i) Adequately wet the material and ensure that it remains wet until collected and contained or treated in preparation for disposal in accordance with §61.150; and

(ii) Carefully lower the material to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material.

(iii) Transport the material to the ground via leak-tight chutes or containers if it has been removed or stripped more than 50 feet above ground level and was not removed as units or in sections.

(iv) RACM contained in leak-tight wrapping that has been removed in accordance with paragraphs (c)(4) and (c)(3)(i)(B)(3) of this section need not be wetted.

(7) When the temperature at the point of wetting is below 0 °C (32 °F):

(i) The owner or operator need not comply with paragraph (c)(2)(i) and the wetting provisions of paragraph (c)(3) of this section.

(ii) The owner or operator shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extent possible.

(iii) During periods when wetting operations are suspended due to freezing temperatures, the owner or operator must record the temperature in the area containing the facility components at the beginning, middle, and end of each workday and keep daily temperature records available for inspection by the Administrator during normal business hours at the demolition or renovation site. The owner or operator shall retain the temperature records for at least 2 years.

(8) Effective 1 year after promulgation of this regulation, no RACM shall be stripped, removed, or otherwise handled or disturbed at a facility regulated by this section unless at least one on-site representative, such as a foreman or management-level person or other authorized representative, trained in the provisions of this regulation and the means of complying with them, is present. Every 2 years, the trained on-site individual shall receive refresher training in the provisions of this regulation. The required training shall include as a minimum: applicability; notifications; material identification; control procedures for removals including, at least, wetting, local exhaust ventilation, negative pressure enclosures, glove-bag procedures, and High Efficiency Particulate Air (HEPA) filters; waste

disposal work practices; reporting and recordkeeping; and asbestos hazards and worker protection. Evidence that the required training has been completed shall be posted and made available for inspection by the Administrator at the demolition or renovation site.

(9) For facilities described in paragraph (a)(3) of this section, adequately wet the portion of the facility that contains RACM during the wrecking operation.

(10) If a facility is demolished by intentional burning, all RACM including Category I and Category II nonfriable ACM must be removed in accordance with the NESHAP before burning.

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Postmark	Date Received	Notification #
I. TYPE OF NOTIFICATION (1=Original 2=Revised 3=Cancelled):			
II. FACILITY INFORMATION (Building owner, removal contractor, and other operator):			
OWNER NAME:			
Address:			
City:	State:	Zip:	
Contact:		Tel:	
REMOVAL CONTRACTOR:			
Address:			
City:	State:	Zip:	
Contact:		Tel:	
OTHER OPERATOR:			
Address:			
City:	State:	Zip:	
Contact:		Tel:	
III. TYPE OF OPERATION (1=Demo 2=Planned Demo 3=Renovation 4=Emer. Renovation):			
IV. IS ASBESTOS PRESENT? (Yes/No):			
V. FACILITY DESCRIPTION (Include building name, number and floor or room number):			
Bldg Name:			
Address:			
City:	State:	Quadrant:	
Site Location:			
Building Size:	# of Floors:	Age in Years:	
Present Use:	Prior Use:		

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:

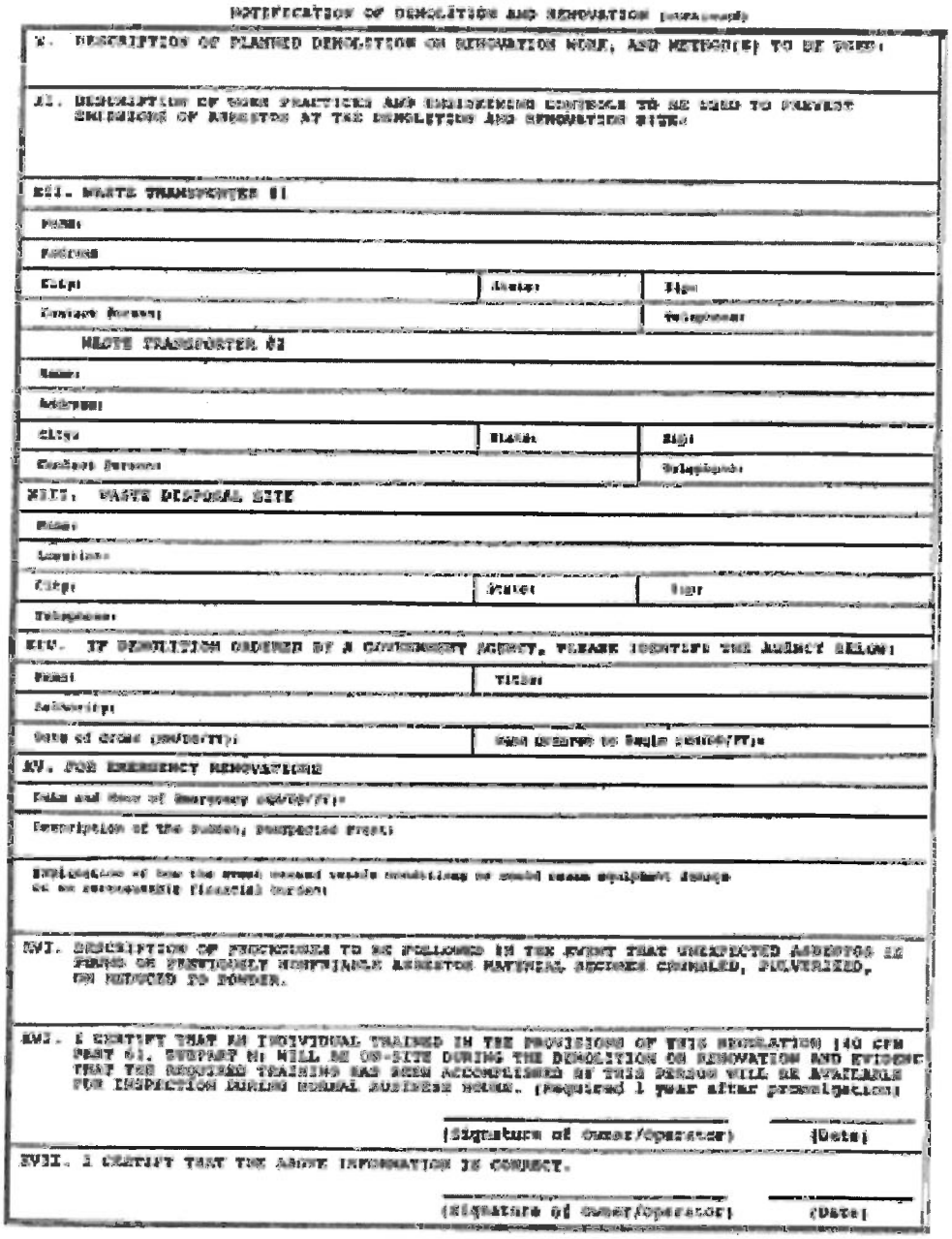
VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1 = Regulated ACM to be removed 2 = Category I NOT to be removed 3 = Category II NOT to be removed	RACM To Be Removed	Friable Asbestos Material not To Be Removed		Estimated Dept of Environment Amount	
		Cat I	Cat II	Units	
Floor				Sq/Ft:	Sq M:
Surface Area				Sq/Ft:	Sq M:
Lin Feet Of Pipe/Any Component				Sq/Ft:	Sq M:

VIII. SCHEDULED DATES ASBESTOS REMOVAL (mo/day/yr) Started: Completed:

IX. SCHEDULED DATES DEMO/RENOVATION (mo/day/yr) Started: Completed:

Continued on page two

Figure 3. Notification of Demolition and Renovation



NOTIFICATION OF DEMOLITION AND RENOVATION

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:

XII. WASTE TRANSPORTER #1

Name:

Address:

City: State: Zip:

Contact Person: Telephone:

WASTE TRANSPORTER #2

Name:

Address:

City: State: Zip:

Contact Person: Telephone:

XIII. WASTE DISPOSAL SITE

Name:

Location:

City: State: Zip:

Telephone:

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: Title:

Authority:

Date of Order (mm/dd/yy): Date Deadline to Begin Demo(mm/dd/yy):

XV. FOR EMERGENCY RENOVATIONS:

Date and Hour of Emergency (mm/dd/yy):

Description of the Sudden, Unexpected Event:

Explanation of how the event caused unsafe conditions or caused damage equipment, losses or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVI. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of owner/operator) (Date)

XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.

(Signature of owner/operator) (Date)

Figure 1. Notification of Demolition and Renovation

The above requirements are applicable to the University of Idaho during renovation/demolition projects involving asbestos containing materials and the Permittee has committed to comply with these requirements. Therefore, no futher discussion is required.

7.6 MACT Applicability (40 CFR 63)

Because the facility has three older compression ignition IC engines powering electrical generators (S-G01, S-G02, and S-G03), a gasoline dispensing facility (for vehicle refueling), and a wood waste-fired boiler the following NESHAP requirements apply to this facility:

- 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
- 40 CFR 63, Subpart CCCCCC - National Emissions Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities
- 40 CFR 63, Subpart JJJJJJ - National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

40 CFR 60, Subpart ZZZZ **National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

§ 63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

§ 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.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

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

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 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 as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

This facility is an area source for HAPs emissions. Therefore, the older IC engine at this facility (S-G01, S-G02, and S-G03) may be subject to the requirements of Subpart ZZZZ.

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

This subpart applies to each affected source.

Section (a) defines an affected source as 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.

Sections (1)(i) through (1)(iv) defines **existing** stationary RICE as the following:

For stationary RICE with a site rating of more than 500 brake horsepower (bhp) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

For stationary RICE with a site rating of less than or equal to 500 brake bhp located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

Sections (2)(i) through (2)(iii) defines **new** stationary RICE as the following:

A stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

A stationary RICE with a site rating of equal to or less than 500 bhp located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

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.

Section (3)(i) through (2)(iii) defines **reconstructed** stationary RICE as the following:

A stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

A stationary RICE with a site rating of equal to or less than 500 bhp located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

Section (b) specifies which stationary RICE are subject to limited requirements of this subpart. An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f). The requirements of (b)(1)(i) through (ii) are as follows:

The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions.

The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions.

Section (2) specifies that a new or reconstructed stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10% or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(f) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

Section (3) allows that the following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

Existing spark ignition 2-stroke lean-burn (2SLB) stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions;

Existing spark ignition 4-stroke lean-burn (4SLB) stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions;

Existing emergency stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions;

Existing limited use stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions;

Existing stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10% or more of the gross heat input on an annual basis;

Existing residential emergency stationary RICE located at an area source of HAP emissions;

Existing commercial emergency stationary RICE located at an area source of HAP emissions; or

Existing institutional emergency stationary RICE located at an area source of HAP emissions.

All three emergency IC engines, S-G01, S-G02, and S-G03 were installed prior to June 12, 2006 per the Applicant (1995, 2001, and 1998 respectively). Therefore, for Subpart ZZZZ IC engines S-G01, S-G02, and S-G03 are considered "existing." The other IC engines at the facility powering electrical generators (listed in Section 5.5) are considered "existing institutional emergency stationary RICE located at an area source of HAP emissions. Therefore, Subpart ZZZZ does not apply to these IC engines.

40 CFR 60, Subpart CCCCCC **National Emissions Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities**

§ 63.11110 What is the purpose of this subpart?

This subpart establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF). This subpart also establishes requirements to demonstrate compliance with the emission limitations and management practices.

§ 63.11111 Am I subject to the requirements in this subpart?

(a) The affected source to which this subpart applies is each GDF that is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.

(b) If your GDF has a monthly throughput of less than 10,000 gallons of gasoline, you must comply with the requirements in §63.11116.

(c) If your GDF has a monthly throughput of 10,000 gallons of gasoline or more, you must comply with the requirements in §63.11117.

(d) If your GDF has a monthly throughput of 100,000 gallons of gasoline or more, you must comply with the requirements in §63.11118.

(e) An affected source shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. For new or

reconstructed affected sources, as specified in §63.11112(b) and (c), recordkeeping to document monthly throughput must begin upon startup of the affected source. For existing sources, as specified in §63.11112(d), recordkeeping to document monthly throughput must begin on January 10, 2008. For existing sources that are subject to this subpart only because they load gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, recordkeeping to document monthly throughput must begin on January 24, 2011. Records required under this paragraph shall be kept for a period of 5 years.

(f) If you are an owner or operator of affected sources, as defined in paragraph (a) of this section, you are not required to obtain a permit under 40 CFR part 70 or 40 CFR part 71 as a result of being subject to this subpart. However, you must still apply for and obtain a permit under 40 CFR part 70 or 40 CFR part 71 if you meet one or more of the applicability criteria found in 40 CFR 70.3(a) and (b) or 40 CFR 71.3(a) and (b).

(g) The loading of aviation gasoline into storage tanks at airports, and the subsequent transfer of aviation gasoline within the airport, is not subject to this subpart.

(h) Monthly throughput is the total volume of gasoline loaded into, or dispensed from, all the gasoline storage tanks located at a single affected GDF. If an area source has two or more GDF at separate locations within the area source, each GDF is treated as a separate affected source.

(i) If your affected source's throughput ever exceeds an applicable throughput threshold, the affected source will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable throughput threshold.

(j) The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to §63.11116 of this subpart.

(k) For any affected source subject to the provisions of this subpart and another Federal rule, you may elect to comply only with the more stringent provisions of the applicable subparts. You must consider all provisions of the rules, including monitoring, recordkeeping, and reporting. You must identify the affected source and provisions with which you will comply in your Notification of Compliance Status required under §63.11124. You also must demonstrate in your Notification of Compliance Status that each provision with which you will comply is at least as stringent as the otherwise applicable requirements in this subpart. You are responsible for making accurate determinations concerning the more stringent provisions, and noncompliance with this rule is not excused if it is later determined that your determination was in error, and, as a result, you are violating this subpart. Compliance with this rule is your responsibility and the Notification of Compliance Status does not alter or affect that responsibility.

The Applicant states that their facility is an area source of HAP emissions and that their throughput of gasoline is less than 10,000 gallons per month. Therefore, this facility is required to comply with §63.11116 of this subpart. These requirements are assured by Permit Condition 7.1 and 7.5.

§ 63.11112 What parts of my affected source does this subpart cover?

(a) The emission sources to which this subpart applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDF that meet the criteria specified in §63.11111. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by this subpart.

(b) An affected source is a new affected source if you commenced construction on the affected source after November 9, 2006, and you meet the applicability criteria in §63.11111 at the time you commenced operation.

(c) An affected source is reconstructed if you meet the criteria for reconstruction as defined in §63.2.

(d) An affected source is an existing affected source if it is not new or reconstructed.

The Applicant states that their facility is an affected source.

§ 63.11113 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section, except as specified in paragraph (d) of this section.

(1) If you start up your affected source before January 10, 2008, you must comply with the standards in this subpart no later than January 10, 2008.

(2) If you start up your affected source after January 10, 2008, you must comply with the standards in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the standards in this subpart no later than January 10, 2011.

(c) If you have an existing affected source that becomes subject to the control requirements in this subpart because of an increase in the monthly throughput, as specified in §63.11111(c) or §63.11111(d), you must comply with the standards in this subpart no later than 3 years after the affected source becomes subject to the control requirements in this subpart.

(d) If you have a new or reconstructed affected source and you are complying with Table 1 to this subpart, you must comply according to paragraphs (d)(1) and (2) of this section.

(1) If you start up your affected source from November 9, 2006 to September 23, 2008, you must comply no later than September 23, 2008.

(2) If you start up your affected source after September 23, 2008, you must comply upon startup of your affected source.

(e) The initial compliance demonstration test required under §63.11120(a)(1) and (2) must be conducted as specified in paragraphs (e)(1) and (2) of this section.

(1) If you have a new or reconstructed affected source, you must conduct the initial compliance test upon installation of the complete vapor balance system.

(2) If you have an existing affected source, you must conduct the initial compliance test as specified in paragraphs (e)(2)(i) or (e)(2)(ii) of this section.

(i) For vapor balance systems installed on or before December 15, 2009, you must test no later than 180 days after the applicable compliance date specified in paragraphs (b) or (c) of this section.

(ii) For vapor balance systems installed after December 15, 2009, you must test upon installation of the complete vapor balance system.

(f) If your GDF is subject to the control requirements in this subpart only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must comply with the standards in this subpart as specified in paragraphs (f)(1) or (f)(2) of this section.

(1) If your GDF is an existing facility, you must comply by January 24, 2014.

(2) If your GDF is a new or reconstructed facility, you must comply by the dates specified in paragraphs (f)(2)(i) and (ii) of this section.

(i) If you start up your GDF after December 15, 2009, but before January 24, 2011, you must comply no later than January 24, 2011.

(ii) If you start up your GDF after January 24, 2011, you must comply upon startup of your GDF.

The Applicant states that their facility was required to comply witht the requirements of this subpart by January 10, 2011.

§ 63.11115 What are my general duties to minimize emissions?

Each owner or operator of an affected source under this subpart must comply with the requirements of paragraphs (a) and (b) of this section.

(a) You must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. 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.

(b) You must keep applicable records and submit reports as specified in §63.11125(d) and §63.11126(b).

These requirements are assured by new Permit Conditions 7.2 and 7.6.

§ 63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.

(a) You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

(1) Minimize gasoline spills;

(2) Clean up spills as expeditiously as practicable;

(3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

(4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

These requirements are assured by new Permit Condition 7.3.

(b) You are not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

This requirement is assured by new Permit Condition 7.7.

(c) You must comply with the requirements of this subpart by the applicable dates specified in §63.11113.

This requirement is assured by new Permit Condition 7.4.

(d) Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

§ 63.11125 What are my recordkeeping requirements?

(a) Each owner or operator subject to the management practices in §63.11118 must keep records of all tests performed under §63.11120(a) and (b).

(b) Records required under paragraph (a) of this section shall be kept for a period of 5 years and shall be made available for inspection by the Administrator's delegated representatives during the course of a site visit.

(c) Each owner or operator of a gasoline cargo tank subject to the management practices in Table 2 to this subpart must keep records documenting vapor tightness testing for a period of 5 years. Documentation must include each of the items specified in §63.11094(b)(2)(i) through (viii). Records of vapor tightness testing must be retained as specified in either paragraph (c)(1) or paragraph (c)(2) of this section.

(1) The owner or operator must keep all vapor tightness testing records with the cargo tank.

(2) As an alternative to keeping all records with the cargo tank, the owner or operator may comply with the requirements of paragraphs (c)(2)(i) and (ii) of this section.

(i) The owner or operator may keep records of only the most recent vapor tightness test with the cargo tank, and keep records for the previous 4 years at their office or another central location.

(ii) Vapor tightness testing records that are kept at a location other than with the cargo tank must be instantly available (e.g., via e-mail or facsimile) to the Administrator's delegated representative during the course of a site visit or within a mutually agreeable time frame. Such records must be an exact duplicate image of the original paper copy record with certifying signatures.

(d) Each owner or operator of an affected source under this subpart shall keep records as specified in paragraphs (d)(1) and (2) of this section.

(1) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(2) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

These requirements are assured by new Permit Condition 7.6.

§ 63.11126 What are my reporting requirements?

(a) Each owner or operator subject to the management practices in §63.11118 shall report to the Administrator the results of all volumetric efficiency tests required under §63.11120(b). Reports submitted under this paragraph must be submitted within 180 days of the completion of the performance testing.

(b) Each owner or operator of an affected source under this subpart shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.11115(a), including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.

These requirements are assured by new Permit Condition 7.8.

§ 63.11130 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions apply to you.

40 CFR 60, Subpart JJJJJJ **National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources**

What This Subpart Covers

§ 63.11193 Am I subject to this subpart?

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler as defined in §63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in §63.2, except as specified in §63.11195.

§ 63.11194 What is the affected source of this subpart?

(a) This subpart applies to each new, reconstructed, or existing affected source as defined in paragraphs (a)(1) and (2) of this section.

(1) The affected source is the collection of all existing industrial, commercial, and institutional boilers within a subcategory (coal, biomass, oil), as listed in §63.11200 and defined in §63.11237, located at an area source.

(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler within a subcategory, as listed in §63.11200 and as defined in §63.11237, located at an area source.

(b) An affected source is an existing source if you commenced construction or reconstruction of the affected source on or before June 4, 2010.

(c) An affected source is a new source if you commenced construction or reconstruction of the affected source after June 4, 2010 and you meet the applicability criteria at the time you commence construction.

(d) A boiler is a new affected source if you commenced fuel switching from natural gas to solid fossil fuel, biomass, or liquid fuel after June 4, 2010.

(e) 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 part 71 as a result of this subpart. You may, however, be required to obtain a title V permit due to another reason or reasons. See 40 CFR 70.3(a) and (b) or 71.3(a) and (b). Notwithstanding the exemption from title V permitting for area sources under this subpart, you must continue to comply with the provisions of this subpart.

There is one wood-waste-fired boiler and three natural gas-fired boilers installed at this facility. Therefore, the one wood-waste-fired boiler is subject to the requirements of this subpart.

§ 63.11195 Are any boilers not subject to this subpart?

The types of boilers listed in paragraphs (a) through (g) of this section are not subject to this subpart and to any requirements in this subpart.

(a) Any boiler specifically listed as, or included in the definition of, an affected source in another standard(s) under this part.

(b) Any boiler specifically listed as an affected source in another standard(s) established under section 129 of the Clean Air Act.

(c) A boiler required to have a permit under section 3005 of the Solid Waste Disposal Act or covered by subpart EEE of this part (e.g., hazardous waste boilers).

(d) A boiler that is used specifically for research and development. This exemption does not include boilers that solely or primarily provide steam (or heat) to a process or for heating at a research and development facility. This exemption does not prohibit the use of the steam (or heat) generated from the boiler during research and development, however, the boiler must be concurrently and primarily engaged in research and development for the exemption to apply.

(e) A gas-fired boiler as defined in this subpart.

(f) A hot water heater as defined in this subpart.

(g) Any boiler that is used as a control device to comply with another subpart of this part, provided that at least 50 percent of the heat input to the boiler is provided by the gas stream that is regulated under another subpart.

As stated previously, there is one wood-waste-fired boiler and three natural gas-fired boilers installed at this facility. Therefore, the one wood-waste-fired boiler is subject to the requirements of this subpart.

§ 63.11196 What are my compliance dates?

(a) If you own or operate an existing affected boiler, you must achieve compliance with the applicable provisions in this subpart as specified in paragraphs (a)(1) through (3) of this section.

(1) If the existing affected boiler is subject to a work practice or management practice standard of a tune-up, you must achieve compliance with the work practice or management standard no later than March 21, 2012.

(2) If the existing affected boiler is subject to emission limits, you must achieve compliance with the emission limits no later than March 21, 2014.

(3) If the existing affected boiler is subject to the energy assessment requirement, you must achieve compliance with the energy assessment requirement no later than March 21, 2014.

(b) If you start up a new affected source on or before May 20, 2011, you must achieve compliance with the provisions of this subpart no later than May 20, 2011.

(c) If you start up a new affected source after May 20, 2011, you must achieve compliance with the provisions of this subpart upon startup of your affected source.

(d) If you own or operate an industrial, commercial, or institutional boiler and would be subject to this subpart except for the exemption in §63.11195(b) for commercial and industrial solid waste incineration units covered by 40 CFR part 60, subpart CCCC or subpart DDDD, and you cease combusting solid waste, you must be in compliance with this subpart on the effective date of the waste to fuel switch.

The one wood-waste-fired boiler is subject to the tune-up requirements and the energy assessment requirement. Therefore, the compliance dates are March 21, 2012 and March 21, 2014 respectively. These requirements are assured by new Permit Condition 4.12.

Emission Limits, Work Practice Standards, Emission Reduction Measures, and Management Practices

§ 63.11200 What are the subcategories of boilers?

The subcategories of boilers are coal, biomass, and oil. Each subcategory is defined in §63.11237.

§ 63.11201 What standards must I meet?

(a) You must comply with each emission limit specified in Table 1 to this subpart that applies to your boiler.

(b) You must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to this subpart that applies to your boiler. An energy assessment completed on or after January 1, 2008 that meets the requirements in Table 2 to this subpart satisfies the energy assessment portion of this requirement.

Table 5.8 - Table 2 to Subpart JJJJJJ of Part 63-Work Practice Standards, Emission Reduction Measures, and Management Practices

If your boiler is in this subcategory...	You must meet the following...
1. Existing or new coal, new biomass, and new oil (units with heat input capacity of 10 million Btu per hour or greater)	Minimize the boiler's startup and shutdown periods following the manufacturer's recommended procedures. If manufacturer's recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available.
2. Existing or new coal (units with heat input capacity of less than 10 million Btu per hour)	Conduct a tune-up of the boiler biennially as specified in §63.11223.
3. Existing or new biomass or oil	Conduct a tune-up of the boiler biennially as specified in §63.11223.
4. Existing coal, biomass, or oil (units with heat input capacity of 10 million Btu per hour and greater)	Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table satisfies the energy assessment requirement. The energy assessment must include: (1) A visual inspection of the boiler system, (2) An evaluation of operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints, (3) Inventory of major systems consuming energy from affected boiler(s), (4) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage, (5) A list of major energy conservation measures, (6) A list of the energy savings potential of the energy conservation measures identified,

	(7) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

(c) You must comply with each operating limit specified in Table 3 to this subpart that applies to your boiler.

(d) These standards apply at all times.

Biomass means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue and wood products (e.g., trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings); animal manure, including litter and other bedding materials; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (e.g., almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds. This definition of biomass is not intended to suggest that these materials are or are not solid waste.

Biomass subcategory includes any boiler that burns at least 15 percent biomass on an annual heat input basis.

These requirements are assured by new Permit Conditions 4.8, 4.9, and 4.10.

General Compliance Requirements

§ 63.11205 What are my general requirements for complying with this subpart?

(a) At all times you must operate and maintain any affected source, 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 you 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 that 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.

(b) You can demonstrate compliance with any applicable mercury emission limit using fuel analysis if the emission rate calculated according to §63.11211(c) is less than the applicable emission limit. Otherwise, you must demonstrate compliance using stack testing.

(c) If you demonstrate compliance with any applicable emission limit through performance stack testing and subsequent compliance with operating limits (including the use of continuous parameter monitoring system), with a CEMS, or with a COMS, you must develop a site-specific monitoring plan according to the requirements in paragraphs (c)(1) through (3) of this section for the use of any CEMS, COMS, or continuous parameter monitoring system. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under §63.8(f).

(1) For each continuous monitoring system required in this section (including CEMS, COMS, or continuous parameter monitoring system), you must develop, and submit to the delegated authority for approval upon request, a site-specific monitoring plan that addresses paragraphs (c)(1)(i) through (vi) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation of your CMS. This requirement to develop and submit a site specific monitoring plan does not apply to affected sources with existing monitoring plans that apply to CEMS and COMS prepared under appendix B to part 60 of this chapter and which meet the requirements of §63.11224.

(i) Installation of the continuous monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(iv) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1)(ii), (c)(3), and (c)(4)(ii);

(v) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(vi) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c) (as applicable in Table 8 to this subpart), (e)(1), and (e)(2)(i).

(2) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(3) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

These requirements are assured by new Permit Condition 4.11.

Initial Compliance Requirements

§ 63.11210 What are my initial compliance requirements and by what date must I conduct them?

(a) You must demonstrate initial compliance with each emission limit specified in Table 1 to this subpart that applies to you by either conducting performance (stack) tests, as applicable, according to §63.11212 and Table 4 to this subpart or, for mercury, conducting fuel analyses, as applicable, according to §63.11213 and Table 5 to this subpart.

(b) For existing affected boilers that have applicable emission limits, you must demonstrate initial compliance no later than 180 days after the compliance date that is specified in §63.11196 and according to the applicable provisions in §63.7(a)(2).

(c) For existing affected boilers that have applicable work practice standards, management practices, or emission reduction measures, you must demonstrate initial compliance no later than the compliance date that is specified in §63.11196 and according to the applicable provisions in §63.7(a)(2).

(d) For new or reconstructed affected sources, you must demonstrate initial compliance no later than 180 calendar days after March 21, 2011 or within 180 calendar days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(e) For affected boilers that ceased burning solid waste consistent with §63.11196(d), you must demonstrate compliance within 60 days of the effective date of the waste-to-fuel switch. If you have not conducted your compliance demonstration for this subpart within the previous 12 months, you must complete all compliance demonstrations before you commence or recommence combustion of solid waste.

These requirements are assured by new Permit Condition 4.12.

§ 63.11214 How do I demonstrate initial compliance with the work practice standard, emission reduction measures, and management practice?

(a) If you own or operate an existing or new coal-fired boiler with a heat input capacity of less than 10 million Btu per hour, you must conduct a performance tune-up according to §63.11223(b) and you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted a tune-up of the boiler.

(b) If you own or operate an existing or new biomass-fired boiler or an existing or new oil-fired boiler, you must conduct a performance tune-up according to §63.11223(b) and you must submit a signed

statement in the Notification of Compliance Status report that indicates that you conducted a tune-up of the boiler.

(c) If you own or operate an existing affected boiler with a heat input capacity of 10 million Btu per hour or greater, you must submit a signed certification in the Notification of Compliance Status report that an energy assessment of the boiler and its energy use systems was completed and submit, upon request, the energy assessment report.

(d) If you own or operate a boiler subject to emission limits in Table 1 of this subpart, you must minimize the boiler's startup and shutdown periods following the manufacturer's recommended procedures, if available. If manufacturer's recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. You must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available.

These requirements are assured by new Permit Condition 4.13.

Continuous Compliance Requirements

§ 63.11223 How do I demonstrate continuous compliance with the work practice and management practice standards?

(a) For affected sources subject to the work practice standard or the management practices of a tune-up, you must conduct a biennial performance tune-up according to paragraphs (b) of this section and keep records as required in §63.11225(c) to demonstrate continuous compliance. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.

(b) You must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7) of this section.

(1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 36 months).

(2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.

(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.

(4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.

(5) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).

(6) Maintain onsite and submit, if requested by the Administrator, biennial report containing the information in paragraphs (b)(6)(i) through (iii) of this section.

(i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler.

(ii) A description of any corrective actions taken as a part of the tune-up of the boiler.

(iii) The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler.

(7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.

(c) If you own or operate an existing or new coal-fired boiler with a heat input capacity of 10 million Btu per hour or greater, you must minimize the boiler's time spent during startup and shutdown following the manufacturer's recommended procedures and you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted startups and shutdowns according to the manufacturer's recommended procedures.

These requirements are assured by new Permit Conditions 4.9.

§ 63.11226 How can I assert an affirmative defense if I exceed an emission limit during a malfunction?

In response to an action to enforce the standards set forth in paragraph §63.11201 you may assert an affirmative defense to a claim for civil penalties for exceedances of numerical emission limits that are caused by malfunction, as defined at §63.2. Appropriate penalties may be assessed, however, if you fail to meet your burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(a) To establish the affirmative defense in any action to enforce such a limit, you must timely meet the notification requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:

(1) The excess emissions:

(i) Were caused by a sudden, infrequent, and unavoidable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner, and

(ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and

(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

(iv) Were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(2) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

(3) The frequency, amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions; and

(4) If the excess emissions resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(5) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health; and

(6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

(7) All of the actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs; and

(8) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions; and

(9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

(b) *Notification.* The owner or operator of the facility experiencing an exceedance of its emission limit(s) during a malfunction shall notify the Administrator by telephone or facsimile (FAX) transmission as soon as possible, but no later than two business days after the initial occurrence of the malfunction, if it wishes to avail itself of an affirmative defense to civil penalties for that malfunction. The owner or operator seeking to assert an affirmative defense shall also submit a written report to the Administrator within 45 days of the initial occurrence of the exceedance of the standard in §63.11201 to demonstrate, with all necessary supporting documentation, that it has met the requirements set forth in paragraph (a) of this section. The owner or operator may seek an extension of this deadline for up to 30 additional days by submitting a written request to the Administrator before the expiration of the 45 day period. Until a request for an extension has been approved by the Administrator, the owner or operator is subject to the requirement to submit such report within 45 days of the initial occurrence of the exceedance.

These requirements are assured by new Permit Condition 4.14.

Other Requirements and Information

§ 63.11235 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

These requirements are assured by new Permit Condition 4.27.

7.7 CAM Applicability (40 CFR 64)

Individual permit units at facilities that are subject to Tile V permitting requirements (Tier I permits) may be subject to the requirements of 40 CFR Part 64, Compliance Assurance Monitoring (CAM). 40 CFR Part 64 requires CAM for units that meet the following three criteria:

1) The unit must have an emission limit for the pollutant;
2) The unit must have add-on controls for the pollutant; these are devices such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers; and
3) The unit must have a pre-control potential to emit of greater than the major source thresholds.

The only emissions unit at this facility that has an add-on control is the wood waste-fired boiler (a multi-clone for PM_{10} emissions). This unit has a PM_{10} emissions limit and a pre-control potential to emit for PM_{10} greater than the major source thresholds. Therefore, CAM only applies to the wood waste-fired boiler located at this facility. CAM requirements are assured by Permit Conditions 4.7, 4.18, 4.19, 4.20, and 4.26

7.8 Acid Rain Permit (40 CFR 72-75)

The University of Idaho source is not an affected source subject to the Acid Rain Permit program in 40 CFR 72-75.

8. PUBLIC COMMENT

As required by IDAPA 58.01.01.364, a public comment period was made available to the public from November 19, 2012 to December 19, 2012. During this time, comments were not submitted in response to DEQ's proposed action.

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 December 26, 2012 via e-mail. No response was received from EPA Region 10 by DEQ.

Appendix A - Emissions Inventory

Appendix A
Emissions Summary

University of Idaho
Emission Inventory
Emission Summary

Facility-Wide Annual PTE																
Emitting Unit	PM		PM_{10}		PM2.5		SO_2		CO		NO_x		VOC		HAPs	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
Solid Fuels wood-waste fired boiler (S-BA)	8.07	35.37	7.35	32.18	4.36	19.10	2.21	9.68	5.75	25.19	15.17	66.45	1.50	6.58	3.38	14.78
Cleaver-Brooks natural gas-fired boiler (S-BB)	0.56	2.44	0.56	2.44	0.56	2.44	0.04	0.20	6.13	26.84	7.29	31.92	0.40	1.76	0.14	0.60
Babcock & Wilcox natural gas-fired boiler (S-BC)	0.59	2.58	0.59	2.58	0.59	2.58	0.05	0.21	6.48	28.37	7.70	33.74	0.42	1.86	0.15	0.64
Combustion Engineering natural gas-fired boiler (S-BD)	0.32	1.40	0.31	1.35	0.31	1.35	0.02	0.11	3.37	14.76	4.01	17.58	0.22	0.97	0.08	0.33
Diesel Fired Electrical generator engine (SG-01)	1.24	0.31	1.15	0.29	1.11	0.28	1.07	0.27	3.52	0.88	16.32	4.08	1.33	0.33	0.01	0.01
Diesel Fired Electrical generator engine (SG-02)	0.67	0.17	0.62	0.16	0.60	0.15	0.58	0.15	1.90	0.48	8.82	2.21	0.72	0.18	0.01	0.00
Diesel Fired Electrical generator engine (SG-03)	1.58	0.39	1.46	0.36	1.41	0.35	1.36	0.34	4.47	1.12	20.73	5.18	1.69	0.42	0.02	0.01
Diesel Fired Electrical generator engine Kibbie Dome 300kW (SG-06)	1.19	0.30	1.10	0.28	1.07	0.27	1.03	0.26	3.38	0.85	15.70	3.92	1.28	0.32	0.01	0.01
Diesel-Fired Electrical generator engine Library 250kW (SG-05)	0.83	0.21	0.76	0.19	0.74	0.18	0.71	0.18	2.34	0.58	10.85	2.71	0.89	0.22	0.01	0.00
Diesel-Fired Electrical generator engine Renfrew hall 450kw (SG-04)	1.64	0.41	1.52	0.38	1.47	0.37	1.42	0.35	4.65	1.16	21.56	5.39	1.76	0.44	0.02	0.01
0															0.00	0.00
Insignificant Sources	0.48	2.09	0.47	2.06	0.47	2.06	0.14	0.60	4.02	17.63	7.38	32.34	1.16	5.06		0.27
Paved/Unpaved Road Fugitive Sources			7.31	32.01			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Paved/Unpaved Parking Lot Fugitive Sources			1.97	8.63			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Miscellaneous Fugitive Sources	1.69	7.39	0.86	3.78	0.42	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Total Emissions:	17.17	45.67	23.19	74.28	12.69	29.13	8.64	12.33	46.00	117.87	135.53	205.52	11.38	18.15	3.82	16.66

Appendix A
Significant Sources

University of Idaho
Emission Inventory
Significant Sources

Significant Sources Annual PTE (See Next Page for Emission Factors and Calculations for Boilers, Furnaces, and Engines)

Significant Sources	Rated Capacity (MM Btu/hr)	Model	Capacity Limit (lb steam/hr)[1]	PM EF (lb/lb steam; lb/MMBtu; or lb/unit)	PM lb/hr	PM ton/yr	PM_{10} EF (lb/lb steam; lb/MMBtu; or lb/unit)	PM_{10} lb/hr	PM_{10} ton/yr	$PM_{2.5}$ EF (lb/lb steam; lb/MMBtu; or lb/unit)	$PM_{2.5}$ lb/hr	$PM_{2.5}$ ton/yr	SO_2 EF (lb/MMBtu)	SO_2 lb/hr	SO_2 ton/yr	CO lb/hr	CO ton/yr	NO_x lb/hr	NO_x ton/yr
Solid Fuels wood-waste fired boiler (S-8A)[2]	88.4	Custom Built	88,800	0.1200	6.97	35.37	0.1100	7.55	32.18	0.0953	4.35	18.10	0.0250	2.21	9.68	5.79	25.19	15.17	66.45
Cleaver-Brooks natural gas fired boiler (S-8B)	74.37	DLD-75	N/A	0.0075	0.56	2.44	0.0075	0.56	2.44	0.0075	0.56	2.44	0.0008	0.04	0.20	6.13	26.84	7.29	31.92
Babcock & Wilcox natural gas-fired boiler (S-8C)	78.8	FM978	N/A	0.0075	0.59	2.58	0.0075	0.59	2.58	0.0075	0.59	2.58	0.0008	0.05	0.21	6.48	28.37	7.70	33.74
Combustion Engineering natural gas-fired boiler (S-8D)	40.95	NB-242	N/A	0.0075	0.32	1.40	0.0075	0.31	1.35	0.0075	0.31	1.35	0.0008	0.02	0.11	3.37	14.78	4.01	17.58
Diesel-Fired Emergency electrical generator engine Gibb Hall 350kw (SG-01)	3.7	Kohler 18 NA 3100	N/A	0.3354	1.24	0.31	0.3100	1.15	0.29	0.3008	1.11	0.28	0.2900	1.07	0.27	3.52	0.88	16.32	4.08
Diesel Fired Electrical generator engine Power Plant 180kw (SG-02)	2.0	Kohler 18OROZJ181	N/A	0.3354	0.67	0.17	0.3100	0.62	0.16	0.3008	0.60	0.15	0.2900	0.58	0.15	1.90	0.48	8.82	2.21
Diesel-Fired Electrical generator engine McClare Hall 500kw (SG-03)	4.7	CAT 3412	N/A	0.3354	1.58	0.39	0.3100	1.46	0.36	0.3008	1.41	0.35	0.2900	1.36	0.34	4.47	1.12	20.73	5.18
Diesel-Fired Electrical generator engine Kibbie Dome 390kW (SG-06)	3.56	Kohler 200REOZJD	N/A	0.3354	1.19	0.30	0.3100	1.10	0.28	0.3008	1.07	0.27	0.2900	1.03	0.26	3.38	0.85	15.70	3.92
Diesel-Fired Electrical generator engine Library 250kW (SG-05)	2.5	Kohler 25CRZEOZJE	N/A	0.3354	0.83	0.21	0.3100	0.78	0.19	0.3008	0.74	0.18	0.2900	0.71	0.18	2.34	0.58	10.85	2.71
Diesel-Fired Electrical generator engine Renfrew hall 450kw (SG-04)	4.59	Caterpillar G6B16804	N/A	0.3354	1.54	3.41	0.3100	1.42	0.38	0.3008	1.47	0.37	0.2900	1.42	0.35	4.65	1.16	21.56	5.39
Total =					16.89	43.58		15.41	40.21		12.22	27.07		8.91	11.73	41.97	180.24	128.16	173.18

[1]Unit S8A PM, PM_{10}, NOx, and CO emissions were calculated using a proposed steam capacity limit.
Note: All emergency generators limited operating hours to 500 hrs/yr to meet IDAPA 58.01.01.222.01.d exemption criteria

Emissions Total For Insignificant Sources (tons/yr)

NO_x	SO_2		PM/PM_{10}	CO	VOC
12.34	0.60		2.06	17.63	6.06

Emissions Total For Fugitive Sources (tons/yr)

NO_x	SO_2		PM/PM_{10}	CO	VOC
0.00	0.00		29.75	0.00	0.00

Facility-Wide Annual PTE (tons/yr)

PM	PM_{10}		SO_2	CO		NO_x
75.36	72.00		12.33	117.87		205.52

Appendix A
Emission Factors for
Boilers, Furnaces, and Engines

University of Idaho
Emission Inventory
Emission Factors

Solid Fuels Wood-waste Fired Boiler

Solid Fuels Wood-waste Fired Boiler (S-BA) Assume Bark/bark and wet wood/wet wood - fired boiler	NOx EF (lb/1000 lb steam)[a]	SO2 EF (lb/MMBtu)	PM-10 EF (lb/1000 lb steam)[b]	CO EF (lb/1000 lb steam)[c]	VOC EF (lb/MMBtu)
	0.2271	0.025	0.1160	0.0861	0.0170

AP-42, Table 1.6-2,3, September 2003 (SO2 and VOC emission factors)
[a]NOx Emission factor was referenced from Table 3.5 in the Tier I Operating Permit (T1-060203)
[b]PM-10 Emission factor was calculated from the average PM Stack Test Data taken on January 5, 2005
From AP-42 Table 1.6-5 particle size distributions for boilers with multiclones. PM-10 = .91*PM, PM2.5 =.54*PM
[c]CO emission factor was calculated from the highest emission rate recorded in the Stack Test Data taken on March 23, 1998 (Run #2)
Calulation: 5.42 lbs CO/hr / 63,000 lbs steam/hr = 0.0861 lb CO/1000 lbs steam

Small Boilers, Furnaces, and Hot Water Heaters Emission Factors
Assumptions:
Hot water heaters use the same emission factors as small furnaces at < 0.3 MMBtu/hr and at >0.3 MMBtu/hr, apply the small boiler emission factors.

Calculation Method for Potential Emissions Inventory
Emission (ton/yr) = (Rated Heat Input Capacity in MMBtu/hr) * (Pollutant Emission Factor in lb/MMBtu) * (Operating Hours in hr/yr) / (2000 lb/ton)

Natural Gas Fired Boilers Emission Factors

Small Boilers < 100 MMBtu/hr Natural Gas Fired	NOx EF Uncontrolled (lb/MMCF)	SO2 EF (lb/MMCF)	PM-10 EF (lb/MMCF)	CO EF (lb/MMCF)	VOC EF (lb/MMCF)
	100.0	0.6	7.6	84.0	5.5
Assuming a heat value of 1,020 Btu/scf: To convert (lb/MMCF) factors to lb/MMBtu, divide the lb/MMCF factor by 1,020 Btu/scf. PM-10 is front + back half	NOx EF Uncontrolled (lb/MMBtu)	SO2 EF (lb/MMBtu)	PM-10 EF (lb/MMBtu)	CO EF (lb/MMBtu)	VOC EF (lb/MMBtu)
	0.098	0.0006	0.0075	0.0824	0.0054

Referenced AP-42, Natural Gas Combustion, Table 1.4-1,2, July 1998

Natural Gas Fired Furnaces Emission Factors

Residential Furnaces <0.3 MMBtu/hr Natural Gas Fired	NOx EF Uncontrolled	SO2 EF (lb/MMCF)	PM-10 EF (lb/MMCF)	CO EF (lb/MMCF)	VOC EF (lb/MMCF)
	94.0	0.6	7.6	40.0	5.5
Assuming a heat value of 1,020 Btu/scf: To convert (lb/MMCF) factors to lb/MMBtu, divide the lb/MMCF factor by 1,020 Btu/scf.	NOx EF Uncontrolled (lb/MMBtu)	SO2 EF (lb/MMBtu)	PM-10 EF (lb/MMBtu)	CO EF (lb/MMBtu)	VOC EF (lb/MMBtu)
	0.0922	0.0006	0.0075	0.0392	0.0054

Referenced AP-42, Natural Gas Combustion, Table 1.4-1,2, July 1998

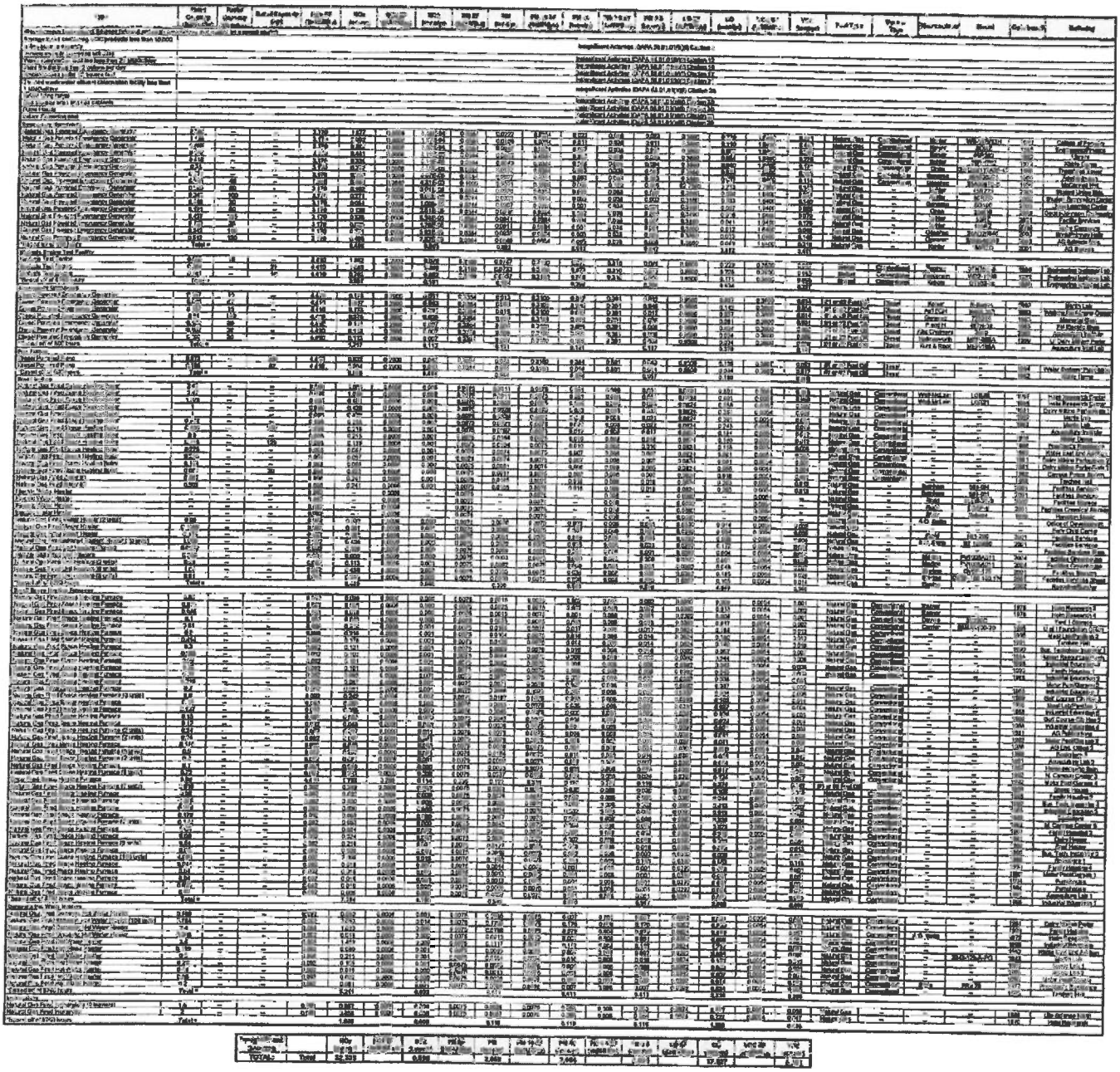
Diesel Engine Emission Factors

Uncontrolled engine emissions based on heat content of fuel to the engine Note:refueling and evaporative organic compound emissions were excluded from the VOC emission factor	NOx EF (lb/MMBtu)	SO2 EF (lb/MMBtu)	PM-10 EF (lb/MMBtu)	CO EF (lb/MMBtu)	VOC EF (lb/MMBtu)
	4.41	0.290	0.310	0.95	0.36

Referenced AP-42, Gasoline and Diesel Industrial Engines, Table 3.3, October 1996
from particle size distributions in AP-42 Table 3.4-2, PM = PM10*.620/.573, PM2.5=PM10* .553/.573

Appendix A
Insignificant Sources

University of Idaho
Emission Inventory
Insignificant Emission Units



Appendix A
Fugitive Emissions
Miscellaneous Sources

University of Idaho
Emission Inventory
Fugitive Emissions - Miscellaneous Sources

Wood Chip Pile

The University maintains a wood chip pile as fuel storage for the wood-fired boiler. Fugitive dust is emitted from this source. See Table 1 for the emission summary of the wood chip pile.

Table 1.

Fugitive Dust Emissions from University Wood Chip Pile - 2006 -					
Quantity of Chips* (tons/yr)	PM10 EF* (lb dust/ton chips)	Moisture Content (%)		tons PM/yr	tons PM2.5/yr
19887	0.36	0.4	1.43	2.86	0.72

*Quantity of Chips is calculated using 2006 data of 9,100 tons added to the chip pile plus 10,787 tons removed from the chip pile to take into account both transfers.
*Emission Factor provided by Darrin Mehr, DEQ, for sawdust, 2000

Wood Chip Off-Loading Station

The wood-fired boiler has an off-loading station for trucks carrying wood chip fuel. A hydraulic powered ramp tilts the truck trailer to dump the wood chips into a hopper which feeds onto a covered conveyor belt system. Fugitive dust is emitted from the dumping of the wood chip fuel. See Table 2 for the emission summary for the wood chip off-loading station.

Table 2.

Fugitive Dust Emissions from University Wood Chip Pile Off-Loading Station (Power Plant) - 2006 -					
Quantity of Chips (tons/yr)	EF* (lb dust/ton chips)	Moisture Content (%)	Dust Emissions	tons PM/yr	tons PM2.5/yr
31462	0.36	0.4	2.27	4.53	1.13

*Emission Factor provided by Darrin Mehr, DEQ, for sawdust, 2000
assume PM = 2*PM10, PM10=2*PM

University of Idaho
Emission Inventory
Fugitive Emissions - Miscellaneous Sources

Sand, Basalt Rock, Top Soil, and Compost Piles

The University maintains sand, basalt rock, top soil, and compost piles for various university activities. Sand is used primarily for sanding sidewalks in the winter, basalt rock is used primarily for sanding roads in the winter, and top soil and compost are used for landscaping activities. Fugitive dust is created by wind erosion and loading/unloading and is emitted from these sources. See Table 3 for the emission summary of the various piles.

Table 3.

Fugitive Dust Emissions (Sand, Basalt Rock, Top Soil, and Composite Pile)		
Material	Estimated Amount of Material (tons/yr)	Emissions (tons/yr)
Sand	40	0.002
Basalt Rock	1022	0.052
Top Soil	458	0.023
Compost	166	0.009
	Total (tons/yr) =	0.086

Aggregate Handling and Storage Piles Fugitive Emissions

$$E = \left[k \times 0.0032 \left(\frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}} \right) \right]$$

Ref: AP-42, Aggregate Handling and Storage Piles, Section 13.2.4, Eq (1), 11/06

Variables	PM-10	Units/Comments	PM	PM-2.5
k =	0.35	for < 10 microgram diameter	0.74	0.11
U =	10	mph	10	10
M =	0.25	% moisture	0.25	0.25

Example Calculation (Sand):

$0.35 \times (0.0032) \times [(15/5)^{1.3} / (0.25/2)^{1.4}] = 0.0859$ lbs of dust per ton of material

PM10	40	tons sand/yr *	0.0507	lbs PM10/ton =	2.03	lbsPM10/yr
PM	40	tons sand/yr *	0.1072	lbs PM10/ton =	4.29	lbsPM10/yr
PM2.5	40	tons sand/yr *	0.0159	lbs PM10/ton =	0.64	lbsPM10/yr

*Note, amount of fugitive dusts are doubled to reflect loading and unloading.

us Sources = 7.39 tons PM/

Appendix B - Facility Comments for Draft Permit

The following comments were received from the facility on November 11, 2012:

Facility Comment: Tier I Permit, Table 3.1 – Last line of table lists a Permit Condition 3.30. There is no Permit Condition 3.30 listed in the draft permit. Delete reference to this permit condition or add the expected permit condition.

DEQ Response: The requested change will be made to the Tier I Permit by deleting the row in Table 3.1 that lists Permit Condition 3.30.

Facility Comment: Tier I Permit Condition 4.9 - Typographical error in CFR reference. Change 63.1123 to 63.11223.

DEQ Response: The requested change will be made to the Tier I Permit.

Facility Comment: Tier I Permit Condition 4.15 - Bullet 4 – "…Periods of excess emissions,…,which result due to startup, shutdown, and scheduled maintenance, shall be clearly identified in the reduced visible emissions documentation." This current computer data system calculates an excess emissions event and notifies the boiler operator that an event has occurred, but does not make a record of the event in the system. The excess emissions event is noted on the printed opacity data supplied with the excess emissions report. We request bullet 4 be modified to allow the University to supply the visible emissions documentation with the excess emissions report required in Permit Condition 3.13.

DEQ Response: The requested change cannot be made to the Tier I Permit without first modifying the underlying permit that established this requirement.

Facility Comment: Tier I Permit Condition 4.18 - This permit condition requires the University to submit a testing plan to conduct a performance test for PM/PM_{10} to verify the indicator range for the Multiclone within 180 days after issuance of the revised Tier I Operating Permit. We believe this condition was fulfilled during the last Tier I Operating Permit and request this requirement be removed from the permit. Note: This comment references the second paragraph of permit condition 4.18, not the first paragraph.

DEQ Response: The requested change will be made to the Tier I Permit. Per the Lewiston Regional Office this requirement has been satisfied and source testing would only need to be condusted in the future if the Permittee decides to modify the CAM plan for the multiclone. Testing of the University of Idaho wood-fired boiler was conducted on December 11, 2008. The test results were received by DEQ on February 9, 2009. The approval date of the source test was on June 16, 2009.

Facility Comment: Tier I Permit, Table 5.2 (Also see Permit Condition 5.2 in Section 6 of the Statement of Basis) – Typographical error in correct grain loading limit. Change 0.080 gr/dscf at 8% oxygen by volume to 0.015 gr/dscf at 3% oxygen by volume.

DEQ Response: The requested changes will be made to the Tier I Permit and the Statement of Basis.

Facility Comment: Tier I Permit Conditions 6.4 thru 6.14 - Typographical error in listing of emergency generator source ID numbers. Change source ID numbers S-G04, S-G04, and S-G06 to S-G04, S-G05, and S-G06

DEQ Response: The requested changes will be made to the Tier I Permit.

Facility Comment: Tier I Permit Condition 6.16 - Typographical error in CFR reference. Change Subpart ZZZZZ to Subpart ZZZZ.

DEQ Response: The requested change will be made to the Tier I Permit.