



IDAHO FOREST
— G R O U P —

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DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE A.Q. PROGRAM

October 9, 2012

Bill Rogers, P.E.
Idaho Department of Environmental Quality
Air Quality Division
1410 N. Hilton
Boise, ID 83706
Tel: (208) 373 – 0502

RE: IFG – Chilco, Tier I Permit Renewal Application

Dear Bill:

Idaho Forest Group (IFG) owns and operates a sawmill and planer mill near Chilco Lake, Idaho, which is regulated under Tier I Operating Permit No. T1-050123. The Tier I renewal application for the Chilco permit is due by November 2, 2012.

IFG is submitting the enclosed renewal application for the Tier I Operating Permit, and is requesting a few minor changes with the renewal. A facility-wide emissions inventory, including PM_{2.5} emissions, is attached to the Tier I application.

Requested Permit Changes

1. Contact information and other facility data are updated as indicated on the permit application forms.
2. Condition 1.3, Regulated Sources, Table 1.1. Remove the Hog Fuel Cyclone. This source was removed by administrative amendment in 2010.
3. Condition 3.11 needs to be updated to show that the required source test was completed before March 29, 2010.
4. Section 4, dry kilns. The mill only has 4 dry kilns, as was noted in the 2005 PTC.
5. Section 5, Sawmill, Table 5.2. Please add source identifiers for permit conditions 5.1 and 5.2.
6. Remove all of Section 6. This source was removed through an administrative amendment in 2010.
7. Section 7. Insignificant Activities. Please update Table 7.1 as shown below.

Table 1 INSIGNIFICANT ACTIVITIES

Description	Insignificant Activities IDAPA 58.01.01.317.01(b)(I) Citation
Bark Hog	IDAPA 58.01.01.317.01(b)(i)(30)
Covered Bark Conveyor	IDAPA 58.01.01.317.01(b)(i)(30)
Hogged Fuel Drop in Fuel House	IDAPA 58.01.01.317.01(b)(i)(30)
Hogged Fuel Bin Truck Loadout	IDAPA 58.01.01.317.01(b)(i)(30)
Sawmill, Indoor	IDAPA 58.01.01.317.01(b)(i)(30)
Sawmill Screen (classifier), indoor	IDAPA 58.01.01.317.01(b)(i)(30)
Sawmill Chipper, indoor	IDAPA 58.01.01.317.01(b)(i)(30)
Sawdust Bin Truck Loadout	IDAPA 58.01.01.317.01(b)(i)(30)
Planer Chipper and Screen	IDAPA 58.01.01.317.01(b)(i)(30)
Planer Chipper Target Box	IDAPA 58.01.01.317.01(b)(i)(30)
Planer Chip Bin Truck Loadout	IDAPA 58.01.01.317.01(b)(i)(30)
Planer Shavings Bin Truck Loadout	IDAPA 58.01.01.317.01(b)(i)(30)
Fire Water Pump	IDAPA 58.01.01.317.01(b)(i)(30)
Small generators and compressors	IDAPA 58.01.01.317.01(b)(i)(6)

Permit Application Package

The Tier I Permit Renewal application consists of the following forms and attachments:

- Idaho Form GI, General Information
- Idaho Form CSTI, Tier I Cover Sheet
- Idaho Form CAM, compliance Assurance Monitoring
- Idaho Form FRA, Federal Regulation Applicability, with attachment
- Complete Potential to Emit Emissions Inventory
- Copy of Semi-annual Report, verification that source is in compliance

Contact Information

Thank you for your assistance in coordinating the PTC and Tier I permit applications. If you have technical questions about this permit application, please contact Larry Benda at (208)-255-9228 or Diane Lorenzen at (406)-549-0210.

Sincerely,



Kevin Esser
Chief Financial Officer

Attachments



DEQ AIR QUALITY PROGRAM
 1410 N. Hilton, Boise, ID 83706
 For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

General Information **Form GI**
 Revision 7
 2/18/10

Please see instructions on page 2 before filling out the form.

All information is required. If information is missing, the application will not be processed.

IDENTIFICATION

1. Company Name		2. Facility Name:	
Idaho Forest Group LLC		IFG - Chilco	
3. Brief Project Description:	Renew Tier I Permit		

FACILITY INFORMATION

4. Primary Facility Permit Contact Person/Title	Larry Benda	Boiler Head
5. Telephone Number and Email Address	(208) 255-9228	lbenda@idfg.com
6. Alternate Facility Contact Person/Title	Mike Henley	Plant Manager
7. Telephone Number and Email Address	(208) 255-3220	mhenley@idfg.com
8. Address to Which the Permit Should be Sent	4447 E. Chilco Road	
9. City/County/State/Zip Code	Athol	Kootenai Idaho 83801
10. Equipment Location Address (if different than the mailing address above)		
11. City/County/State/Zip Code		
12. Is the Equipment Portable?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
13. SIC Code(s) and NAICS Code	Primary SIC: 2421	Secondary SIC: NAICS: 321113
14. Brief Business Description and Principal Product	Sawmill, dry kilns and planer mill that produce finished lumber	
15. Identify any adjacent or contiguous facility that this company owns and/or operates	None	

16. Specify the reason for the application	<input type="checkbox"/> Permit to Construct (PTC)	
	<div style="border: 1px solid black; padding: 5px;"> <p>For Tier I permitted facilities only: If you are applying for a PTC then you must also specify how the PTC will be incorporated into the Tier I permit.</p> <p><input type="checkbox"/> Incorporate the PTC at the time of the Tier I renewal</p> <p><input type="checkbox"/> Co-process the Tier I modification and PTC</p> <p><input type="checkbox"/> Administratively amend the Tier I permit to incorporate the PTC upon your request (IDAPA 58.01.01.209.05.a, b, or c)</p> </div>	
	<input checked="" type="checkbox"/> Tier I Permit <input type="checkbox"/> Tier II Permit <input type="checkbox"/> Tier II/Permit to Construct	

CERTIFICATION

In accordance with IDAPA 58.01.01.123 (Rules for the Control of Air Pollution in Idaho), I certify based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

17. Responsible Official's Name/Title	Kevin Esser	Chief Financial Officer
18. Responsible Official's Signature		Date: October 9, 2012
19. <input checked="" type="checkbox"/> Check here to indicate that you would like to review the draft permit prior to final issuance.		



DEQ AIR QUALITY PROGRAM
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Air Permit Hotline – 1-877-5PERMIT

Cover Sheet for Air Permit Application – Tier I **Form CSTI**
 Revision 5
 08/28/08

Please see instructions on page 2 before filling out the form.

COMPANY NAME, FACILITY NAME, AND FACILITY ID NUMBER			
1. Company Name	Idaho Forest Group LLC		
2. Facility Name	IFG - Chilco	3. Facility ID No.	055-00024
4. Brief Project Description - One sentence or less	Tier I renewal, with minor permit changes		

PERMIT APPLICATION TYPE	
5. <input type="checkbox"/> Initial Tier I	<input type="checkbox"/> Tier I Administrative Amendment
<input type="checkbox"/> Tier I Minor Modification	<input type="checkbox"/> Tier I Significant Modification
<input checked="" type="checkbox"/> Tier I Renewal: Permit No.: T1-2009.0123 Date Issued: May 2, 2008, Modified October 5, 2009	

FORMS INCLUDED			
Include	N/A	Forms	DEQ Verify
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form CSTI – Cover Sheet	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form GI – Facility Information	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form EU0 – Emissions Units General	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form EU1– Industrial Engine Information	Please specify number of EU1s attached: _____ <input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form EU2– Nonmetallic Mineral Processing Plants	Please specify number of EU2s attached: _____ <input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form EU3– Spray Paint Booth Information	Please specify number of EU3s attached: _____ <input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form EU4– Cooling Tower Information	Please specify number of EU4s attached: _____ <input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form EU5 – Boiler Information	Please specify number of EU5s attached: _____ <input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form CBP– Concrete Batch Plant	Please Specify number of CBPs attached: _____ <input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form HMAP – Hot Mix Asphalt Plant	Please specify number of HMAPs attached: _____ <input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	PERF – Portable Equipment Relocation Form	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form BCE– Baghouses Control Equipment	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form SCE– Scrubbers Control Equipment	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form VSCE – Venturi Scrubber Control Equipment	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form ESP – Electrostatic Precipitator	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form AO – Afterburner/Oxidizer	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form CYS – Cyclone Separator	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form CA – Carbon Adsorber	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Forms EI-CP1 - EI-CP4– Emissions Inventory– criteria pollutants (Excel workbook, all 4 worksheets)	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form CAM – Compliance Assurance Monitoring	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form FRA – Federal Regulation Applicability	<input type="checkbox"/>



Please see instructions on pages 3-8 before filling out the form.

IDENTIFICATION			
1. Company Name:	Idaho Forest Group LLC	2. Facility Name:	IFG – Chilco
3. Facility ID No.:	055-00024		
4. Brief Project Description:	CAM monitoring conditions for Tier I permit renewal.		
MONITORING APPROACH SUBMITTAL			
Background			
5. Emissions Unit	Description (type of emission point): Hog Fuel Boiler	Identification (emission point number): Hog Fuel Boiler, EU#1	
6. Applicable Regulation, Emission Limits, and Monitoring Requirements	Applicable regulation citation: IDAPA 58.01.01.677 /PTC NO. P-050116 Tier I T1-2009.0123	Pollutant: PM Emission limit: 0.200 gr/dscf @ 8% oxygen	
		Pollutant: PM Emission limit: 6.93 lb/hr and 30.4 tpy	
	Monitoring requirements: NSPS does not apply, so there are no regulatory monitoring requirements.		
7. Control Technology	Brief description: Multidone, followed by an electrified filter bed (EFB) with a media-cleaning baghouse.		
Table 1. Monitoring Approach			
	Indicator No. 1	Indicator No. 2	Indicator No. 3
I. Indicator Description	Ionizer Current	Ionizer Voltage	Filter Bed Voltage
Measurement Approach	Continuous current monitor (ammeter) with operator readout for each tower.	Continuous voltage monitor (voltmeter) with operator readout for each tower.	Continuous voltage monitor (voltmeter) with operator readout for each tower.
II. Indicator Range (Quality improvement plan threshold optional)	1.0 to 2.5 milliamps (mA)	10 to 40 kilovolts (kV)	4 to 9.5 kilovolts (kV)
III. Performance Criteria	_____	_____	_____
A. Data Representativeness	The current is measured using instrumentation provided by the EFB manufacturer and used as per design.	The voltage is measured using instrumentation provided by the EFB manufacturer and used as per design.	The voltage is measured using instrumentation provided by the EFB manufacturer and used as per design.
B. Verification of Operational Status	Verify that the ammeter is properly calibrated following any repair or maintenance.	Verify that the voltmeter is properly calibrated following any repair or maintenance.	Verify that the voltmeter is properly calibrated following any repair or maintenance.
C. QA/QC Practices and Criteria	Confirm that ammeter reads zero when the EFB is not operating.	Confirm that voltmeter reads zero when the EFB is not operating.	Confirm that voltmeter reads zero when the EFB is not operating.
D. Monitoring Frequency	Record hourly. Monitoring is complete if 20 of 24 hours are recorded.	Record hourly. Monitoring is complete if 20 of 24 hours are recorded.	Record hourly. Monitoring is complete if 20 of 24 hours are recorded.
E. Data Collection Procedures	Data is recorded on daily log forms and maintained on-site for 5 years.	Data is recorded on daily log forms and maintained on-site for 5 years.	Data is recorded on daily log forms and maintained on-site for 5 years.
F. Averaging Period	Current reading is instantaneous at the time recorded.	Voltage reading is instantaneous at the time recorded.	Voltage reading is instantaneous at the time recorded.

Table 1. Monitoring Approach, continued			
	Indicator No. 4	Indicator No. 5	Indicator No. 6
I. Indicator Description	Filter Bed Current	Filter Bed Temperature	Media Baghouse Pressure Drop
Measurement Approach	Continuous current monitor (ammeter) with operator readout for each tower.	Filter bed temperature is measured with a thermocouple at the beginning of the outlet plenum, where the gas streams from the two towers combine.	Pressure sensors are located at the inlet and outlet of the baghouse. Pressures are compared using a differential pressure gauge.
II. Indicator Range (Quality improvement plan threshold optional)	0 to 0.35 milliamps (mA)	≥ 150 °F	0.5 – 6.0 inches water column (" w.c.)
III. Performance Criteria	_____	_____	_____
A. Data Representativeness	The current is measured using instrumentation provided by the EFB manufacturer and used as per design.	Temperature equalizes within the EFB towers and gas exiting the filter beds has essentially the same temperature as the beds.	Pressure differential (pressure drop) across the baghouse may indicate air flow is bypassing the bags (low ΔP) or is obstructed (high ΔP).
B. Verification of Operational Status	Verify that the ammeter is properly calibrated following any repair or maintenance.	Verify that the thermocouple is properly calibrated following any repair or maintenance.	Verify that the pressure sensors are in place
C. QA/QC Practices and Criteria	Confirm that ammeter reads zero when the EFB is not operating.	Confirm that thermocouple temperature approaches ambient temperature when the EFB is not operating.	Confirm that the pressure differential gauge reads zero when air is not flowing through the baghouse.
D. Monitoring Frequency	Record hourly. Monitoring is complete if 20 of 24 hours are recorded.	Record hourly. Monitoring is complete if 20 of 24 hours are recorded.	Record once per day.
E. Data Collection Procedures	Data is recorded on daily log forms and maintained on-site for five years.	Data is recorded on daily log forms and maintained on-site for five years.	Data is recorded on daily log forms and maintained on-site for five years.
F. Averaging Period	Current reading is instantaneous at the time recorded.	Temperature reading is instantaneous at the time recorded.	Pressure differential reading is instantaneous at the time recorded.

Table 1. Monitoring Approach, continued			
	Indicator No. 7		
I. Indicator Description	Visible Emissions		
Measurement Approach	Observation of visible emissions		
II. Indicator Range (Quality improvement plan threshold optional)	If visible emissions are present, corrections are made.		
III. Performance Criteria			
A. Data Representativeness	Under normal operations, emissions from the baghouse are not visible. If visible emissions are noted, it may indicate operational problems with the baghouse.		
B. Verification of Operational Status	Not applicable.		
C. QA/QC Practices and Criteria	Not applicable.		
D. Monitoring Frequency	Quarterly.		
E. Data Collection Procedures	Quarterly observations are included in the quarterly monitoring report.		
F. Averaging Period	Visible emissions observations are instantaneous at the time made.		

Justification	<p>Present justification for selection of monitoring approach(es) and indicator range(s):</p> <p>Justification for Indicator 1: The current on the ionizer provides an indicator of the voltage. A decrease in current could indicate a malfunction, such as a buildup of PM or condensed hydrocarbons on the ionizer.</p> <p>Justification for Indicator 2: The voltage indicates that a corona is formed and is generating ions for charging particles.</p> <p>Justification for Indicator 3: The voltage on the gravel must be maintained so charged PM is attracted to the gravel. A decrease in voltage could indicate a malfunction, such as a short or a buildup of PM or condensed hydrocarbons on the gravel.</p> <p>Justification for Indicator 4: A sudden increase in bed current with no corresponding increase in bed voltage or with a bed voltage at zero indicates a short in the filter bed.</p> <p>Justification for Indicator 5: Filter bed temperature needs to be high enough to ensure that water in the gas stream does not condense. Moisture condensation in the filter bed can result in an electrical short, and contribute the buildup of hydrocarbon glaze on the ionizer or the gravel. This buildup interferes with the corona charging of the ionizer and the electrode charging of the filter bed.</p> <p>Justification for Indicator 6: Pressure differential from the inlet to the outlet of the baghouse (pressure drop) is an indicator of resistance within the baghouse. If the pressure drop is below the normal operating range, it may indicate a leak allowing air to bypass the filter bags. If the pressure drop is above the normal operating range, it may indicate that the flow has become obstructed in some way.</p> <p>Justification for Indicator 7: Under normal operations, emissions from the baghouse are not visible. Therefore, visible emissions may indicate a problem within the baghouse.</p>
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DEQ AIR QUALITY PROGRAM
 1410 N. Hilton, Boise, ID 83706
 For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

AIR PERMIT APPLICATION

Revision 6
 10/7/09

For each box in the table below, CTRL+click on the blue underlined text for instructions and information.

IDENTIFICATION	
1. Company Name: <p style="text-align: center;">Idaho Forest Group LLC</p>	2. Facility Name: <p style="text-align: center;">IFG - Chilco</p>
3. Brief Project Description: Tier I Permit Renewal Application	
APPLICABILITY DETERMINATION	
4. List applicable subparts of the New Source Performance Standards (NSPS) (40 CFR part 60). Examples of NSPS affected emissions units include internal combustion engines, boilers, turbines, etc. The applicant must thoroughly review the list of affected emissions units.	List of applicable subpart(s): <p style="text-align: center;">Not Applicable</p>
5. List applicable subpart(s) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) found in 40 CFR part 61 and 40 CFR part 63 . Examples of affected emission units include solvent cleaning operations, industrial cooling towers, paint stripping and miscellaneous surface coating. EPA has a web page dedicated to NESHAP that should be useful to applicants.	List of applicable subpart(s): <p>NESHAP Subpart DDDD – Plywood and Composite Wood Products MACT</p> <p>NESHAP Subpart ZZZZ – Reciprocating Internal Combustion Engines. Applies to fire-water pump engine.</p> <p>NESHAP Subpart DDDDD – Boiler MACT</p>
6. For each subpart identified above, conduct a complete a regulatory analysis using the instructions and referencing the example provided on the following pages. Note - Regulatory reviews must be submitted with sufficient detail so that DEQ can verify applicability and document in legal terms why the regulation applies. Regulatory reviews that are submitted with insufficient detail will be determined incomplete.	<input checked="" type="checkbox"/> A detailed regulatory review is provided (Follow instructions and example).

**NESHAPS REGULATORY ANALYSIS FOR
IDAHO FOREST GROUP – LACLEDE
NESHAPS Subpart DDDD**

TITLE 40--PROTECTION OF ENVIRONMENT, CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY, PART 63 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES. Subpart DDDD - National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products

Sec. 63.2231 Does this subpart apply to me?

This subpart applies to you if you meet the criteria in paragraphs (a) and (b) of this section.

(a) You own or operate a PCWP manufacturing facility. A PCWP manufacturing facility is a facility that manufactures plywood and/or composite wood products by bonding wood material (fibers, particles, strands, veneers, etc.) or agricultural fiber, generally with resin under heat and pressure, to form a structural panel or engineered wood product. **Plywood and composite wood products manufacturing facilities also include facilities that manufacture dry veneer and lumber kilns located at any facility.** Plywood and composite wood products include, but are not limited to, plywood, veneer, particleboard, oriented strandboard, hardboard, fiberboard, medium density fiberboard, laminated strand lumber, laminated veneer lumber, wood I-joists, **kiln-dried lumber**, and glue-laminated beams.

(b) The PCWP manufacturing facility is located at a major source of HAP emissions. A major source of HAP emissions is any stationary source or group of stationary sources within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year.

At the time the PCWP NESHAPS went into effect, the sawmill at Laclede had the potential to emit more than 25 tpy of combined HAPs, and was a major source of HAP emissions. Idaho Forest Group is now applying for HAPs limits which so that the Laclede mill is no longer a major source of HAP emissions. The PCWP NESHAPS will continue to apply, after the mill is permitted as a Synthetic Minor HAPs source.

Sec. 63.2232 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, or existing affected source at a PCWP manufacturing facility.

(b) ... **The affected source includes lumber kilns at PCWP manufacturing facilities and at any other kind of facility.**

(c) An affected source is a new affected source if you commenced construction of the affected source after January 9, 2003, and you meet the applicability criteria at the time you commenced construction.

(d) An affected source is reconstructed if you meet the criteria as defined in Sec. 63.2.

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

The lumber kilns at the Laclede sawmill are an affected existing source.

NSPS/NESHAP Regulation Review and Applicability Form **FRA**

Sec. 63.2252 What are the requirements for process units that have no control or work practice requirements?

...For process units not subject to the compliance options or work practice requirements specified in Sec. 63.2240 (including, but not limited to, lumber kilns), you are not required to comply with the compliance options, work practice requirements, performance testing, monitoring, SSM plans, and recordkeeping or reporting requirements of this subpart, or any other requirements in subpart A of this part, except for the initial notification requirements in Sec. 63.9(b).

There are no applicable requirements in the PCWP MACT regulations for lumber dry kilns except for initial notification requirements. The previous owner of the Laclede sawmill, Riley Creek Lumber, submitted the initial notification for the PCWP MACT on January 25, 2005. A copy of the notification follows.

**NESHAPS REGULATORY ANALYSIS FOR
IDAHO FOREST GROUP – LACLEDE
NESHAPS Subpart ZZZZ**

PART 63 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE.
Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for
Stationary Reciprocating Internal Combustion Engines

**This is the CFR version of Subpart ZZZZ with the changes from the March 3,
2010 Final version included. Only applicable subparts have been printed.**

Sec. 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.

The Laclede fire-water pump engine is a diesel-fired (compression ignition) RICE. After the permit modifications, Laclede will be an Area Source of HAP.

Sec. 63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

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

(1) Existing stationary RICE.

(iii) 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.

The Laclede fire-water pump engine is an affected source, and was installed in 2004. It is an existing emergency stationary RICE.

Sec. 63.6595 When do I have to comply with this subpart?

(a) (1) If you have an ... existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in Sec. 63.6645 and in 40 CFR part 63, subpart A.

According to 63.6645(5), notifications are not required for an existing stationary emergency CI RICE. IFG understands that notification is not required for the fire-water pump engine.

Sec. 63.6603 What emissions limitations and operating limitations must I meet if I own or operate an existing stationary CI RICE located at an area source of HAP emissions?

(a) If you own or operate an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

The Laclede fire-water pump has a rating of 220 brake HP and is not subject to any requirements in Table 2b. The following are the applicable operating limitations in Table 2d:

Table 2d to Subpart ZZZZ of Part 63. Requirements for Existing Compression Ignition Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§ 63.6600 and 63.6640, you must comply with the following emission and operating limitations for existing compression ignition stationary RICE:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency CI and black start CI.	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

Sec. 63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.

IFG must comply with the operational requirements in Table 2d and listed above.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring

NSPS/NESHAP Regulation Review and Applicability Form **FRA**

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 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.

IFG must operate the fire-water engine as described above.

Sec. 63.6625 What are my monitoring, installation, operation, and maintenance requirements?

(e) If you own or operate an existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions, an existing stationary emergency RICE, or an existing stationary RICE located at an area source of HAP emissions not subject to any numerical emission standards shown in Table 2d to this subpart, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

IFG must operate the fire-water engine as described above.

(h) If you operate a new or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

IFG must operate the fire-water engine as described above during startup.

Sec. 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?

(a) You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this subpart.

Table 5 to Subpart ZZZZ does not contain emission or operating limitations that apply to the Inaclede fire-water pump engine.

Sec. 63.6635 How do I monitor and collect data to demonstrate continuous compliance?

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

IFG is not required to demonstrate continuous compliance for the Laclede fire-water pump engine because it is an emergency engine.

Sec. 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

IFG must maintain records of operation to ensure compliance with the operational limitations listed in Table 2d for this emergency engine.

IFG must comply with the conditions of Section 63.6640(f) as listed below.

(f) If you own or operate ... an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the engine according to the conditions described in paragraphs (f)(1) through (4) of this section.

(1) For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in nonemergency situations for 50 hours per year, as permitted in this section, is prohibited.

IFG could operate the fire-water pump in non-emergency situations for up to 50 hours per year if needed.

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

(3) You may operate your emergency stationary RICE 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. 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 RICE beyond 100 hours per year.

(4) You may operate your emergency stationary RICE 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 power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program ...

Section 63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

(2) An existing stationary CI RICE located at an area source of HAP emissions.

NSPS/NESHAP Regulation Review and Applicability Form **FRA**

(5) This requirement does not apply if you own or operate an existing stationary CI RICE less than 100 HP, an existing stationary emergency CI RICE, or an existing stationary CI RICE that is not subject to any numerical emission standards.

The Laclede fire-water Pump is an existing stationary emergency CI RICE, and therefore does not have to submit the notifications.

Sec. 63.6650 What reports must I submit and when?

(a) You must submit each report in Table 7 of this subpart that applies to you. **No reports in Table 7 apply.**

Sec. 63.6655 What records must I keep?

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

- (1) An existing stationary CI RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.
- (2) An existing stationary emergency CI RICE.
- (3) An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, **you must keep records of the hours of operation of the engine that is recorded through the nonresettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.** If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

IFG must record hours of operation on a nonresettable hour meter and document the purpose of the operating hours.

Sec. 63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to Sec. 63.10(b)(1).

(b) As specified in Sec. 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

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

IFG must keep records of engine operation for 5 years, as described below.

NSPS/NESHAP Regulation Review and Applicability Form **FRA**

Sec. 63.6665 What parts of the General Provisions apply to me?

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

If you own or operate ... a stationary RICE located at an area source of HAP emissions, ... you do not need to comply with any of the requirements of the General Provisions ...

IFG does not need to comply with any requirements of the General Provisions for the Laclede fire-water pump engine.

Sec. 63.6675 What definitions apply to this subpart?

These are important definitions related to IFG's determination of applicability for Subpart ZZZZ.

Black start engine means an engine whose only purpose is to start up a combustion turbine.

Emergency stationary RICE means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used for peak shaving are not considered emergency stationary ICE.

Applicability Review for Attachment to Idaho Form FRA

TITLE 40--PROTECTION OF ENVIRONMENT, CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY, PART 63 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES. Subpart DDDD - National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products

Sec. 63.2231 Does this subpart apply to me?

This subpart applies to you if you meet the criteria in paragraphs (a) and (b) of this section.

(a) You own or operate a PCWP manufacturing facility. A PCWP manufacturing facility is a facility that manufactures plywood... and/or composite wood... **Plywood and composite wood products manufacturing facilities also include facilities that manufacture dry veneer and lumber kilns located at any facility.** Plywood and composite wood products include, but are not limited to, plywood, veneer, particleboard, oriented strand board, hardboard, fiberboard, medium density fiberboard, laminated strand lumber, laminated veneer lumber, wood I-joists, kiln-dried lumber, and glue-laminated beams.

(b) The PCWP manufacturing facility is located at a major source of HAP emissions.

The IFG Chilco facility is a major source of HAPs and includes lumber dry kilns. Therefore the PCWP NESHAPS applies.

Sec. 63.2232 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, or existing affected source at a PCWP manufacturing facility. (b) ... **The affected source includes lumber kilns at PCWP manufacturing facilities and at any other kind of facility.** (c) An affected source is a new affected source if you commenced construction of the affected source after January 9, 2003, and you meet the applicability criteria at the time you commenced construction. (d) An affected source is reconstructed if you meet the criteria as defined in Sec. 63.2. (e) An affected source is existing if it is not new or reconstructed.

The lumber kilns at the Chilco sawmill are an affected existing source.

Sec. 63.2252 What are the requirements for process units that have no control or work practice requirements?

...For process units not subject to the compliance options or work practice requirements specified in Sec. 63.2240 (including, but not limited to, lumber kilns), you are not required to comply with the compliance options, work practice requirements, performance testing, monitoring, SSM plans, and recordkeeping or reporting requirements of this subpart, or any other requirements in subpart A of this part, except for the initial notification requirements in Sec. 63.9(b).

There are no applicable requirements in the PCWP MACT regulations for lumber dry kilns except for initial notification requirements. Riley Creek Lumber, a predecessor of Idaho Forest Group, submitted the initial notification for the PCWP MACT as required.

Applicability Review for Attachment to Idaho Form FRA

TITLE 40--PROTECTION OF ENVIRONMENT, CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY, PART 63_NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES. Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

§ 63.7485 Am I subject to this subpart?

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in § 63.7575 that is located at, or is part of, a major source of HAP ..**The Chilco boiler is located at a major source of HAPs and is subject to this subpart.**

§ 63.7490 What is the affected source of this subpart?

(a) This subpart applies to new, reconstructed, or existing affected sources .. (d) A boiler or process heater is existing if it is not new or reconstructed. **The Chilco boiler is an existing sources.**

This regulation is still under development by EPA. IFG will file a complete applicability review when the regulation is final.

**IDAHO FOREST GROUP
CHILCO, IDAHO
Emission Inventory/Calculations
PTE Inventory**

Fugitive Sources	PM10 (ton/yr)	PM2.5 (ton/yr)	SO2 (ton/yr)	NOx (ton/yr)	VOCs (ton/yr)	CO (ton/yr)	HAPS (ton/yr)
Log and Bark Handling, Fugitives							
DEBARKER	3.22	0.32	---	---	---	---	---
BARK HOG	0.59	0.06	---	---	---	---	---
COVERED BARK CONVEYOR	0.59	0.06	---	---	---	---	---
HOGGED FUEL DROP IN FUEL HOUSE	0.94	0.09	---	---	---	---	---
HOGGED FUEL TRUCK BIN LOADOUT	0.59	0.06	---	---	---	---	---
Sawmill, Fugitives							
SAWMILL, INDOOR	1.17	0.12	---	---	---	---	---
SAWMILL SCREEN (CLASSIFIER), INDOOR	0.63	0.06	---	---	---	---	---
SAWMILL CHIPPER, INDOOR	0.63	0.06	---	---	---	---	---
SAWDUST BIN TRUCK LOADOUT	1.33	0.13	---	---	---	---	---
SAWMILL CHIP BIN TRUCK LOADOUT	3.13	0.31	---	---	---	---	---
Planer, Fugitives							
PLANER CHIPPER AND SCREEN	0.13	0.01	---	---	---	---	---
PLANER CHIP BIN TRUCK LOADOUT	1.25	0.13	---	---	---	---	---
PLANER SHAVINGS BIN TRUCK LOADOUT	1.50	0.15	---	---	---	---	---
Fugitive Road Dust							
FUGITIVE DUST - PAVED ROADS	0.49	0.12	---	---	---	---	---
Fugitive Totals	16.16	1.69	0.00	0.00	0.00	0.00	0.00
Point Sources							
Lumber Drying							
LUMBER DRY KILNS	3.25	1.63	---	---	175	---	31.4
Sawmill Point Sources							
SAWMILL CHIP BIN VENT - POINT SOURCE	6.27	0.63	---	---	---	---	---
SAWDUST BIN VENT - POINT SOURCE	2.65	0.27	---	---	---	---	---
FIREWATER PUMP	0.00	0.00	0.00	0.00	0.00	0.00	---
Planer Point Sources							
PLANER CHIPPER TARGET BOX - POINT SOURCE	1.25	0.13	---	---	---	---	---
PLANER SHAVINGS CYCLONE BAGHOUSE - POINT SOURCE	5.44	0.54	---	---	---	---	---
Steam Plant							
HOG FUEL BOILER	30.4	24.3	12.1	106	29.9	246	19.3
EFB MEDIA BAGHOUSE	1.0	1.0	---	---	---	---	---
Point Source Totals	50.2	28.5	12.1	106	205	246	50.7
Plant Wide Total	66.4	30.2	12.06	106	205	246	50.7

Greenhouse Gas, plantwide, excludes biogenic CO2:

6,000 metric ton equivalent CO₂

IDAHO FOREST GROUP - CHILCO
Emission Inventory/Calculations
PTE Emissions

Lumber Production		
Sawmill	325,000	mbdft/year
Dry Kilns	325,000	mbdft/year
Planer	325,000	mbdft/year
Logs Used	1,170,000	tons/year
Sawmill Hours	8,760	hours/year, est
Planer Hours	8,760	hours/year

Steam Production 607,594 1000 lbs/yr

Residuals Production			
	tons/year	Estimation Factor	
Sawmill Chips	250,792	Permit	lb chips/mbdft sawmill
Sawdust	106,144	Permit	lb sawdust/mbdft sawmill
Hog Bark	234,000	400	lb bark/ton logs
Planer Chips	50,000	Permit	lb chips/mbdft planer
Shavings	120,000	Permit	lb shavings/mbdft planer

KIPPER & SONS HOG FUEL BOILER

Controlled by EFB

69.36 1000 lb steam/hr
23,551 dscfm @ 0% O2 (stack test)
37,100 dscfm @ 8% O2, max
8,760 Hours/Year, potential
125 mmBtu/hr maximum
607,594 1000 lb steam/year
964,859 mmBtu/year
1.95E+10 dscf/yr

Permit Limit

CRITERIA POLLUTANTS

PM (controlled):

Emission Factor: 0.08 gr/dscf @ 8% Oxygen
Emissions: 111.4 tons/year
610.6 lbs/day
25.44 lbs/hr

Regulatory Limit
Potential Hours
Potential Emissions

PM10 (controlled):

Emissions: 30.4 tons/year
166.3 lbs/day
6.93 lbs/hr

Permit Limit

PM2.5 (controlled):

Emissions: 24.3 tons/year
133.1 lbs/day
5.54 lbs/hr

Permit Limit
Assume 80% of PM10 for controlled combustion source

Sulfur Dioxide:

Emission Factor: 0.025 lb/mmBtu
Emissions: 12.06 tons/year
75.00 lbs/day
3.13 lbs/hr

(AP-42 TABLE 1.6-2, Rev 9/03)
Actual based on mmBtu/yr

Nitrogen Oxides (NOx)

Emission Factor: 0.22 lb/mmBtu
Emissions: 106.13 tons/year
660.0 lbs/day
27.50 lbs/hr

(AP-42 TABLE 1.6-2, Rev 9/03)
Actual based on mmBtu/yr

Volatile Organic Compounds (VOC)

Emission Factor: 0.062 lb/mmBtu
Emissions: 29.91 tons/year
186.0 lbs/day
7.75 lbs/hr

Value from air quality for this boiler when it was at Sandpoint

Carbon Monoxide (CO)

Emission Factor: 0.81 lb/1000 lb steam
Emissions: 246.08 tons/year
2141.2 lbs/day
56.18 lbs/hr

Permit Limit

Lead (Pb)

Emission Factor: 4.80E-05 lb/mmBtu
Emissions: 2.32E-02 tons/year
1.44E-01 lbs/day
6.00E-03 lbs/hr

(AP-42 TABLE 1.6-4, Rev 9/03)

EFB MEDIA BAGHOUSE

PM10/PM2.5 : 5000 scf/min

Emission Factor: 0.0054 gr/dscf

Emissions: 1.0 tpy
5.55 lbs/day
0.23 lb/hr

Baghouse design flow.
Baghouse design emission rate.
Permit Limit
Assumed to be all PM2.5
Permit Limit

The uncontrolled emissions from this source are not known, therefore this is not defined as an insignificant source.

**IDAHO FOREST GROUP - CHILCO BOILER
HAZARDOUS AIR POLLUTANTS (HAPS)**

Operating Parameters:

Potential Hours of Operation

8,760 hours/yr

Annual Boiler Heat Input, actual

964,859 mmBtu /yr

Emission Factors:		
AP-42 Ch.1.6, Tables 1.6-3 and 1.6-4 (9/03)	Emission Factor (lb/mmBtu)	Total Annual Emissions (tons/yr)
Acetaldehyde	8.3E-04	4.00E-01
Acetophenone	3.2E-09	1.54E-06
Acrolein	4.0E-03	1.93E+00
Benzene	4.2E-03	2.03E+00
Benzo(a)pyrene	2.6E-06	1.25E-03
bis(2-ethylhexyl)phthalate	4.7E-08	2.27E-05
Bromomethane (methyl bromide)	1.5E-05	7.24E-03
2-Butanone (MEK)	5.4E-06	2.61E-03
Carbon tetrachloride	4.5E-05	2.17E-02
Chlorine	7.9E-04	3.81E-01
Chlorobenzene	3.3E-05	1.59E-02
Chloroform	2.8E-05	1.35E-02
Chloromethane (Methyl Chloride)	2.3E-05	1.11E-02
1,2-Dichloroethane	2.9E-05	1.40E-02
Dichloromethane (Methylenechloride)	2.9E-04	1.40E-01
1,2-Dichloropropane (Propylene dichloride)	3.3E-05	1.59E-02
Ethylbenzene	3.1E-05	1.50E-02
Formaldehyde (Permit Limit = 2.41 tpy)	4.4E-03	2.12E+00
Hydrogen chloride	1.9E-02	9.17E+00
Methanol (from ODEQ)	1.4E-03	6.75E-01
Naphthalene	9.7E-05	4.68E-02
4-Nitrophenol	1.1E-07	5.31E-05
Pentachlorophenol	5.1E-08	2.46E-05
Phenol	5.1E-05	2.46E-02
Polycyclic Organic Matter (POM)	2.9E-06	1.39E-03
Benzo(a)anthracene	6.5E-08	
Benzo(a)pyrene	2.6E-06	
Benzo(b)fluoranthene	1.0E-07	
Benzo(k)fluoranthene	3.6E-08	
Indeno(1,2,3,cd)pyrene	8.7E-08	
Styrene	1.9E-03	9.17E-01
2,3,7,8-Tetrachlorodibenzo-p-dioxins	8.6E-12	4.15E-09
Toluene	9.2E-04	4.44E-01
1,1,1-Trichloroethane (Methyl Chloroform)	3.1E-05	1.50E-02
2,4,6-Trichlorophenol <	2.2E-08	1.06E-05
Vinyl Chloride	1.8E-05	8.68E-03
o-Xylene	2.5E-05	1.21E-02
Antimony	7.9E-06	3.81E-03
Arsenic	2.2E-05	1.06E-02
Beryllium	1.1E-06	5.31E-04
Cadmium	4.1E-06	1.98E-03
Chromium, total	2.1E-05	1.01E-02
Chromium, hexavalent	3.5E-06	1.69E-03
Cobalt	6.5E-06	3.14E-03
Lead	4.8E-05	2.32E-02
Manganese	1.6E-03	7.72E-01
Mercury	3.5E-06	1.69E-03
Nickel	3.3E-05	1.59E-02
Selenium	2.8E-06	1.35E-03
TOTAL HAPS		19.27

LUMBER DRY KILNS

325,000 mbdf/yr, lumber dried

CRITERIA POLLUTANTS

PM10 :	Emission Factor:	0.02 lbs/1000 bd.ft.	Oregon General Permit
	Emissions:	3.25 tons/year	AQGP-010
		17.81 lbs/day	
PM2.5 :	Emission Factor:	0.01 lbs/1000 bd.ft.	Assume PM2.5 is 50% of PM10
	Emissions:	1.63 tons/year	AQGP-010
		8.90 lbs/day	
VOC:	Emission Factor:	1.08 lbs/1000 bd.ft.	Sources listed below
	Emissions:	175.1 tons/year	Permit Limit is 175.5 tpy
		959 lbs/day	

VOC emissions based on species-dependent weighted emission factor, using information below. Species mix is typical+A19

Wood Species:	% of Total	VOC as VOC (lb/MBdf)	Weighted (lb/Mbdf)	Source of Emission Factor
Redwood	0%	0.14	0.00	1996 U of I Study
Cedar	0%	0.14	0.00	1996 U of I Study
Douglas Fir	40%	1.03	0.41	2007 OSU Study
Hem Fir	40%	0.68	0.27	2007 OSU Study
ESLP	9%	1.30	0.11	2000 OSU Study
Larch	0%	0.25	0.00	2007 OSU Study
AF(WW)	0%	0.68	0.00	2007 OSU Study
Ponderosa Pine	12%	2.46	0.28	2007 OSU Study
Total	100%		1.08	

Riley Creek - Chilco
Dry Kiln Haps

EMISSIONS YEAR	PTE
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* white wood is Engleman spruce, white fir, etc.

ENTER	
Total MBF processed	325,000
% Douglas Fir /Larch	40.0%
% Hem Fir	40.0%
% Ponderosa Pine	11.5%
% ESLP	8.5%
% Cedar	0.0%
% AF (WW)	0.0%
	100%

130,000 MBF/Yr by species calculated by Total MBF * % species
 130,000
 37,375
 27,625
 0
 0
 325,000

EMISSION FACTORS units of pounds per thousand board feet (lb/mbf)						
Pollutant	Total HAP	Methanol	Formal-dehyde	Acetal-dehyde	Propion-aldehyde	Acrolein
Douglas Fir / Larch	0.1710	0.0962	0.0030	0.0627	0.0070	0.0010
Hem Fir	0.2500	0.1328	0.0032	0.1039	0.0084	0.0018
Pinderosa Pine	0.1483	0.1021	0.0067	0.0334	0.0027	0.0034
ESLP	0.0915	0.0539	0.0030	0.0333	0.0005	0.0008
Cedar	0.0915	0.0539	0.0030	0.0333	0.0005	0.0008
AF (WW)	0.2914	0.1870	0.0045	0.0840	0.0140	0.0019

EMISSIONS units of pounds per year (lb/yr)						
Species	Total HAP	Methanol	Formal-dehyde	Acetal-dehyde	Propion-aldehyde	Acrolein
Douglas Fir / Larch	22230	12506	390	8151	910	130
Hem Fir	32500	17264	416	13507	1092	234
Pinderosa Pine	5543	3816	250	1248	101	127
ESLP	2528	1489	83	920	14	22
Cedar	0	0	0	0	0	0
AF (WW)	0	0	0	0	0	0
TOTAL, lb/yr	62,800	35,075	1,139	23,826	2,117	513
TOTAL, ton/yr	31.40	17.54	0.57	11.91	1.06	0.26

Permit Limit
 is 0.65 tpy

LOGS AND BARK, FUGITIVE EMISSIONS

DEBARKER

1,170,000 Tons of Logs/Year
8,760 Hours/Year

Spray is used as needed to control dust emissions.
Spray is estimated to provide 50% control.

PM10:	Emission Factor:	0.011 lbs/ton	AIRS 3-07-008-01
	Control:	50% spray bars	
	Emissions:	3.22 tons/year 17.63 lbs/day	
PM2.5:	Emission Factor:	0.0011 lbs/ton	10% of PM10 for non-combustion source
	Control:	50% spray bars	
	Emissions:	0.32 tons/year 1.76 lbs/day	

BARK HOG

Insignificant based on total emissions.

234,000 Tons of Bark/Year

PM10:	Emission Factor:	0.05 lbs/ton	General Material Handling Factor
	Emissions:	0.59 tons/year 3.21 lbs/day	Bark Hog is enclosed, 90% control.
PM2.5:	Emission Factor:	0.005 lbs/ton	10% of PM10 for non-combustion source
	Control:	0.06 tons/year	Bark Hog is enclosed, 90% control.
	Emissions:	0.32 lbs/day	

COVERED BARK CONVEYOR

PM10:	Emission Factor:	0.05 lbs/ton	General Material Handling Factor
	Emissions:	0.59 tons/year 3.21 lbs/day	Fully covered conveyor provides 90% control
PM2.5:	Emission Factor:	0.005 lbs/ton	10% of PM10 for non-combustion source
	Control:	0.06 tons/year	Fully covered conveyor provides 90% control
	Emissions:	0.32 lbs/day	

HOGGED FUEL DROP IN FUEL HOUSE

Approx. 80% of fuel goes to fuel house.

PM10:	Emission Factor:	0.05 lbs/ton	General Material Handling Factor
	Emissions:	0.94 tons/year 5.13 lbs/day	Fuel house has 3 sides providing 80% control
PM2.5:	Emission Factor:	0.005 lbs/ton	10% of PM10 for non-combustion source
	Control:	0.09 tons/year	Fuel house has 3 sides providing 80% control
	Emissions:	0.51 lbs/day	

HOGGED FUEL TRUCK BIN LOADOUT

Approx. 20% of fuel goes to hog fuel bins.

PM10:	Emission Factor:	0.05 lbs/ton	General Material Handling Factor
	Emissions:	0.59 tons/year 3.21 lbs/day	Bin has sides panels to block wind, 50% control.
PM2.5:	Emission Factor:	0.005 lbs/ton	10% of PM10 for non-combustion source
	Control:	0.06 tons/year	Bin has sides panels to block wind, 50% control.
	Emissions:	0.32 lbs/day	

SAWMILL PROCESSES

SAWMILL, INDOOR

Insignificant based on total emissions.

1,170,000 Tons of Logs/Year

PM10:	Emission Factor:	0.2 lbs/ton	Idaho Factor
	Controlled EF:	0.002 lbs/ton	Indoors with pneumatic dust pickup.
	Emissions:	1.17 tons/year	99% removal efficiency.
		6.41 lbs/day	
PM25:	Emission Factor:	0.02 lbs/ton	PM2.5 is 10% of PM10 for non-combustion source
	Controlled EF:	0.0002 lbs/ton	Indoors with pneumatic dust pickup.
	Emissions:	0.12 tons/year	99% removal efficiency.
		0.64 lbs/day	

SAWMILL SCREEN (CLASSIFIER), INDOOR

Insignificant based on total emissions.

250,792 Tons of Chips/Year

PM10:	Emission Factor:	0.05 lbs/ton	General Material Handling Factor
	Controlled EF:	0.005 lbs/ton	Enclosed process, 90% control.
	Emissions:	0.63 tons/year	
		3.44 lbs/day	
PM25:	Emission Factor:	0.005 lbs/ton	PM2.5 is 10% of PM10 for non-combustion source
	Controlled EF:	0.0005 lbs/ton	Enclosed process, 90% control.
	Emissions:	0.06 tons/year	
		0.34 lbs/day	

SAWMILL CHIPPER, INDOOR

Insignificant based on total emissions.

250,792 Tons of Chips/Year

PM10:	Emission Factor:	0.05 lbs/ton	General Material Handling Factor
	Controlled EF:	0.005 lbs/ton	Enclosed process, 90% control.
	Emissions:	0.63 tons/year	
		3.44 lbs/day	
PM25:	Emission Factor:	0.005 lbs/ton	PM2.5 is 10% of PM10 for non-combustion source
	Controlled EF:	0.0005 lbs/ton	Enclosed process, 90% control.
	Emissions:	0.06 tons/year	
		0.34 lbs/day	

SAWDUST BIN TRUCK LOADOUT

Insignificant based on total emissions.

106,144 Tons of Sawdust/Year

PM10:	Emission Factor:	0.05 lbs/ton	Idaho DEQ Factor.
	Controlled EF:	0.025 lbs/ton	Sides of loadout blocked from wind, 50% control.
	Emissions:	1.33 tons/year	
		7.27 lbs/day	
PM25:	Emission Factor:	0.005 lbs/ton	PM2.5 is 10% of PM10 for non-combustion source
	Controlled EF:	0.0025 lbs/ton	Sides of loadout blocked from wind, 50% control.
	Emissions:	0.13 tons/year	
		0.73 lbs/day	

SAWMILL CHIP BIN TRUCK LOADOUT

250,792 Tons of Chips/Year

PM10:	Emission Factor:	0.05 lbs/ton	Idaho DEQ Factor.
	Controlled EF:	0.025 lbs/ton	Sides of loadout blocked from wind, 50% control.
	Emissions:	3.13 tons/year	
		17.18 lbs/day	
PM25:	Emission Factor:	0.005 lbs/ton	PM2.5 is 10% of PM10 for non-combustion source
	Controlled EF:	0.0025 lbs/ton	Sides of loadout blocked from wind, 50% control.
	Emissions:	0.31 tons/year	
		1.72 lbs/day	

SAWMILL CHIP BIN VENT - POINT SOURCE

250,792 Tons of Chips/Year

PM10:	Emission Factor:	0.05 lbs/ton	Idaho DEQ Target Box Factor.
	Emissions:	6.27 tons/year	Permit Limit
		34.36 lbs/day	
PM25:	Emission Factor:	0.005 lbs/ton	PM2.5 is 10% of PM10 for non-combustion source
	Emissions:	0.63 tons/year	
		3.44 lbs/day	

SAWDUST BIN VENT - POINT SOURCE

106,144 Tons of Sawdust/Year

PM10:	Emission Factor:	0.05 lbs/ton	Idaho DEQ Target Box Factor.
	Emissions:	2.65 tons/year	Permit Limit
		14.54 lbs/day	
PM25:	Emission Factor:	0.005 lbs/ton	PM2.5 is 10% of PM10 for non-combustion source
	Emissions:	0.27 tons/year	
		1.45 lbs/day	

PLANER PROCESSES

PLANER, INDOOR

There are no emissions from the planers because they are pneumatically controlled through the shavings transport system.

PLANER CHIPPER AND SCREEN

Insignificant based on total emissions.

50,000 Tons of Planer Chips/Year

PM10 :

Emission Factor:	0.05 lbs/ ton	General Material Handling Factor
Controlled EF:	0.005 lbs/ton	Enclosed process, 90% control.
Emissions:	0.13 tons/year	
	0.68 lbs/day	

PM2.5 :

Emission Factor:	0.005 lbs/ ton	PM2.5 is 10% of PM10 for non-combustion source
Controlled EF:	0.0005 lbs/ton	Enclosed process, 90% control.
Emissions:	0.01 tons/year	
	0.07 lbs/day	

PLANER CHIPPER TARGET BOX - POINT SOURCE

Insignificant based on total emissions.

50,000 Tons of Planer Chips/Year

PM10 :

Emission Factor:	0.05 lbs/ ton	Idaho DEQ Factor
Emissions:	1.25 tons/year	
	6.85 lbs/day	

PM2.5 :

Emission Factor:	0.005 lbs/ ton	PM2.5 is 10% of PM10 for non-combustion source
Emissions:	0.13 tons/year	
	0.68 lbs/day	

PLANER CHIP BIN TRUCK LOADOUT

Insignificant based on total emissions.

50,000 Tons of Planer Chips/Year

PM10 :

Emission Factor:	0.05 lbs/ton	Idaho DEQ Factor.
Controlled EF:	0.025 lbs/ton	Sides of loadout blocked from wind, 50% control.
Emissions:	1.25 tons/year	
	6.85 lbs/day	

PM2.5 :

Emission Factor:	0.005 lbs/ ton	PM2.5 is 10% of PM10 for non-combustion source
Controlled EF:	0.0025 lbs/ton	Sides of loadout blocked from wind, 50% control.
Emissions:	0.13 tons/year	
	0.68 lbs/day	

PLANER SHAVINGS BIN TRUCK LOADOUT

Insignificant based on total emissions.

120,000 Tons of Planer Shavings/Year

PM10:

Emission Factor:	0.05 lbs/ton	Idaho DEQ Factor.
Controlled EF:	0.025 lbs/ton	Sides of loadout blocked from wind, 50% control.
Emissions:	1.50 tons/year	
	8.22 lbs/day	

PM25:

Emission Factor:	0.005 lbs/ton	PM2.5 is 10% of PM10 for non-combustion source
Controlled EF:	0.0025 lbs/ton	Sides of loadout blocked from wind, 50% control.
Emissions:	0.15 tons/year	
	0.82 lbs/day	

PLANER SHAVINGS CYCLONE BAGHOUSE - POINT SOURCE

	29000 scf/min	Baghouse design flow.
	8,760 hr/yr	actual
PM10 :		
Emission Factor:	0.005 gr/dscf	Baghouse design emission rate.
Emissions:	5.44 tpy	
	29.83 lbs/day	
	1.24 lb/hr	
PM10 :		
Emission Factor:	0.0005 gr/dscf	Baghouse design emission rate.
Emissions:	0.54 tpy	
	2.98 lbs/day	
	0.12 lb/hr	

FUGITIVE DUST - PAVED ROADS

Calculations based on AP-42 Section 13.2.1.3, rev. 1/11

Source	Class	Number Trips Per Year	Distance per Trip (miles)	VMT	Emission Factor lb/VMT	Controlled Emission tpy	Surface Silt Loading sL	Avg. Vehicle Weight W	Weighted Vehicle Weight
Log Trucks	Paved, Loaded	41,786	0.25	10446	2.54	6.64	1.0	40	7.39
	Paved, Empty	41,786	0.25	10446	0.47	1.23	1.0	13	2.40
Chip Trucks	Paved, Loaded	1,751	0.50	875	2.54	0.56	1.0	40	0.62
	Paved, Empty	1,751	0.50	875	0.47	0.10	1.0	13	0.20
Shavings Trucks	Paved, Loaded	5,882	0.50	2941	2.54	1.87	1.0	40	2.08
	Paved, Empty	5,882	0.50	2941	0.47	0.35	1.0	13	0.68
Sawdust Trucks	Paved, Loaded	0	0.50	0	2.54	0.00	1.0	40	0.00
	Paved, Empty	0	0.50	0	0.47	0.00	1.0	13	0.00
Lumber Trucks	Paved, Loaded	18,056	0.50	9028	2.54	5.74	1.0	40	6.38
	Paved, Empty	18,056	0.50	9028	0.47	1.06	1.0	13	2.07
Misc. Vehicles incl employee	Paved	40,000	0.25	10000	0.05	0.13	1.0	3	0.53
		174,949		56,581					22

$E = k(sL)^{0.91}(W)^{1.02} * [1 - 1.2 * P/N]$

	PM	PM10	PM2.5	P=	N=
k =	0.011	0.0022	0.00054	120	365
sL =	1.1	1.1	1.1		
W =	22	22	22		
E =	0.173	0.035	0.008		
% control from washing/	50%	50%	50%		

Total PM Emissions:	2.4	tpy
Total PM10 Emissions	0.49	tpy
Total PM2.5 Emissions	0.12	tpy

IFG Chilco
Greenhouse Gas Calculations

Hog Fuel Boiler	964,859 MMBtu/year
Carbon Dioxide (CO2) (not actually a greenhouse gas when emitted from biomass burning)	
Emission Factor:	195 lb/mmbtu (AP-42 TABLE 1.6-3, Rev 09/03)
Emissions:	94,074 tpy CO2
Methane	
Emission Factor:	0.021 lb/mmbtu (AP-42 TABLE 1.6-3, Rev 09/03)
Emissions:	20,262 lb/yr
	193.41 metric tons CO2e, GWP = 21
Nitrous Oxide	
Emission Factor:	0.013 lb/mmbtu (AP-42 TABLE 1.6-3, Rev 09/03)
Emissions:	12,543 lb/yr
	1,767.45 metric tons CO2e, GWP = 310
Propane Combustion	10,000 gallons/year, estimated max
Carbon Dioxide (CO2)	
Emission Factor:	12500 lb/1000 gallons (AP-42 TABLE 1.5-1, Rev 07/08)
Emissions:	63 tpy CO2
	57 metric tons CO2e, GWP = 1
Methane	
Emission Factor:	0.2 lb/1000 gallons (AP-42 TABLE 1.5-1, Rev 07/08)
Emissions:	2 lb/yr
	0.02 metric tons CO2e, GWP = 21
Nitrous Oxide	
Emission Factor:	0.3 lb/1000 gallons (AP-42 TABLE 1.5-1, Rev 07/08)
Emissions:	3 lb/yr
	0.42 metric tons CO2e, GWP = 310

Gasoline in On-site Vehicles

Gallons gasoline	20,000 Gallons/yr, estimated max
Gallons diesel	400,000 Gallons/yr
Carbon Dioxide (CO2) , Gasoline	
Emission Factor:	8.81 kg/gallon Table 5, Climate Leader
Emissions:	176 metric tons CO2e, GWP = 1
Carbon Dioxide (CO2) , Diesel	
Emission Factor:	10.15 kg/gallon Table 5, Climate Leader
Emissions:	4,060 metric tons CO2e, GWP = 1
Methane, Gasoline	
Emission Factor:	5.00E-04 kg/gallon Table A-6: Climate Leader
Emissions:	0.21 metric tons CO2e, GWP = 21
Methane, Diesel	
Emission Factor:	5.80E-04 kg/gallon Table A-6: Climate Leader
Emissions:	4.87 metric tons CO2e, GWP = 21
Nitrous Oxide, Gasoline	
Emission Factor:	2.20E-04 kg/gallon Table A-6: Climate Leader
Emissions:	1.36 metric tons CO2e, GWP = 310
Nitrous Oxide, Diesel	
Emission Factor:	2.60E-04 kg/gallon Table A-6: Climate Leader
Emissions:	1.61 metric tons CO2e, GWP = 310

Total GHG Emissions (excluding biogenic CO2)	Stationary Only		
Carbon Dioxide	4,293	57	
Methane	198.51	193.43	
Nitrous Oxide	1,770.84	1,767.87	
	6,262	2,018	metric tons CO2e



687 W. CANFIELD AVE., STE. 100 COEUR D'ALENE, ID 83815 IDAHOFORSTGROUP.COM 208.762.6630

July 23, 2012

Ralph D. Paul
Air Quality Permit Compliance Officer
Department of Environmental Quality
Coeur d'Alene Regional Office
2110 Ironwood Parkway
Coeur d'Alene, ID 83814
Tel: (208) 769-1422

**RE: Idaho Forest Group, LLC
Tier I Semi-annual Compliance Certifications**

Dear Ralph:

Idaho Forest Group LLC is submitting the enclosed Tier I Semi-annual Compliance Certification Reports for the Laclede and Chilco facilities. The reports cover the period from January 1, 2012 through June 30, 2012.

Copies of the Semi-annual Reports have been sent to EPA Region 10 at the address listed below.

Sincerely,

A handwritten signature in blue ink, appearing to read "K. Esser", with a long horizontal flourish extending to the right.

Kevin Esser
Chief Financial Officer

cc EPA Region 10
Air Operating Permits, OAQ-107
1200 Sixth Ave.
Seattle, WA 98101
Tel: (206) 553-1200

Enclosure

TIER I SEMIANNUAL REPORT

FORM AQ-C4

FACILITY INFORMATION

Facility/Permittee Name: Idaho Forest Group – Chilco
Co-Permittee Name(s): N/A
Facility Location: 4447 E. Chilco Road, Athol Idaho
AIRS Facility No.: 055-00024
Facility Contact: Larry Benda Ph: 208-772-0505 Fax: 208-772-2426

PERMIT AND COMPLIANCE INFORMATION

Tier I Operating Permit No.: TI-2009.0123 Issuance Date: May 2, 2008, Mod. Oct. 5, 2009
Tier I Operating Permit No.: N/A Issuance Date: _____
Compliance Reporting Period: From: Jan. 1, 2012 To: June 30, 2012
Deviations Reported This Period? Yes No

List of Attachments: Semiannual Monitoring Table (Form AQ-C5) No. of Pages: 4
 Semiannual Deviation Summary Table (Form AQ-C3) No. of Pages: 2
 Other: _____ No. of Pages: _____
_____ No. of Pages: _____

Certification of Truth, Accuracy, and Completeness (by Responsible Official)

I hereby certify that based on information and belief formed after reasonable inquiry, the statements and information contained in this and any attached and/or referenced document(s) are true, accurate, and complete in accordance with IDAPA 58.01.01.123-124.


Responsible Official Signature

CEO
Responsible Official Title

7/25/2012
Date

Kevin Esser
Print or Type Responsible Official Name

Co-Permittee Responsible Official Signature

Co-Permittee Responsible Official Title

Date

Print or Type Co-Permittee Responsible Official Name

TIER I SEMIANNUAL MONITORING TABLE

FORM AQ-C5

Facility/Permittee Name: Idaho Forest Group - Chilico Tier I Operating Permit No.: TI-2008.0202
 Facility Location: 4447 E. Chilico Road, Athol, Idaho Issuance Date: May 2, 2008, Mod. Oct. 5, 2009
 AIRS Facility No.: 055-00024 Compliance Reporting Period: 1/1/12 through 6/30/12

1 Permit Condition	2 Condition Title / Description	3 Comments
1.	TIER I OPERATING PERMIT SCOPE	
2.	FACILITY-WIDE CONDITIONS	
	Fugitive Dust	
2.1	All reasonable precautions shall be taken to prevent PM from becoming airborne.	
2.2	Monitor and maintain records of the frequency and the method(s) used to reasonable control fugitive dust emissions.	Water/sweeper truck logs are kept on file.
2.3	Maintain records of all fugitive dust complaints received.	Fugitive dust complaint records, including corrective actions if needed, are kept on file. No fugitive dust complaints this reporting period.
2.4	Monthly facility-wide inspection for fugitive emissions.	Monthly fugitive dust inspections performed and documented (6 of 6 months).
	Odors	
2.5	Do not allow emission of odorous gas, liquid or solids to the atmosphere in such quantities as to cause air pollution.	
2.6	Maintain records of all odor complaints received.	Odor complaint records, including corrective actions if needed, are kept on file. No odor complaints this reporting period.
	Visible Emissions	
2.7	Opacity from point sources must be less than 20%.	Six (6) excess emissions reports were filed for possible opacity levels exceeding limit.
2.8	Monthly facility-wide inspection for visible emissions for point sources	Monthly visible emissions inspections performed and documented (6 of 6 months).
	Excess Emissions	
2.9.2	Excess Emissions – Startup, shutdown or scheduled maintenance excess emissions, corrective action to minimize and reduce recurrence, proper reporting; not allowed during stagnation or wood stove advisories.	100% of excess emission events due to startup, shutdown or scheduled maintenance properly reported to IDEQ. No excess emission events reported this period.
2.9.3	Upset, breakdown or safety measures excess emissions.	100% of excess emission events due to upset, breakdown or safety measures, or startup after upset condition properly reported to IDEQ. No excess emission events reported this period.

TIER I SEMIANNUAL MONITORING TABLE

FORM AQ-C5

1 Permit Condition	2 Condition Title / Description	3 Comments
2.9.3.1	Take immediate action to limit or eliminate excess emissions, notify, report & record (Form AQ-C9).	100% of excess emission events given proper response and properly reported to IDEQ. No excess emission events reported this period.
2.9.3.2	IDEQ may require shutdown.	None required during this reporting period.
2.9.4	Written report within 15 days (Form AQ-C10).	100% of excess emission events properly reported in writing, signed by responsible official and sent to IDEQ within 15 days. No excess emission events reported this period.
2.10	Performance Testing Performance Testing – Performance Testing Protocol 15 days prior to test, report 30 days after test is conducted.	No compliance/performance testing required this reporting period.
2.11	Monitoring and Recordkeeping Maintain records of monitoring information for a period of at least 5 years. Reports and Certifications	Records being kept on file.
2.12	Periodic reports and compliance certifications submitted to IDEQ and EPA within 30 days of the end of each specified reporting period. Annual reports are due by January 30. Semi-annual reports are due July 30. Sulfur Content	Periodic reports and compliance certifications submitted on schedule.
2.14	Do not use #1 fuel oil with more than 0.3% sulfur by weight, or #2 fuel oil with more than 5% sulfur by weight.	Fuel supplier sulfur records are on file.
2.14.2	Maintain documentation of supplier verification of distillate fuel oil sulfur content on an as-received basis.	
3.	HOG FUEL-FIRED BOILER	
3.1	The PM ₁₀ emissions from the boiler/EFB stack shall not exceed 6.93 pounds per hour and 30.4 tons per any consecutive 12-month period.	Compliance with the boiler PM ₁₀ emissions limit has been demonstrated through the most recent PM ₁₀ compliance testing, and emissions calculations based on production data.
3.2	The PM ₁₀ emissions from the EFB baghouse stack shall not exceed 0.23 pounds per hour and 1.0 tons per year.	Compliance with the EFB baghouse PM ₁₀ emissions limit has been demonstrated using the baghouse emission rate and emissions calculations based on production data.
3.3	The Carbon Monoxide (CO) emissions from the boiler/EFB stack shall not exceed 0.81 lb CO/1000 lb steam produced and 246.08 tons per year.	Compliance with the boiler CO emissions limit has been demonstrated through the most recent CO compliance testing, and emissions calculations based on production data.
3.4	The formaldehyde emissions from the boiler/EFB stack shall not exceed 2.41 T/yr.	Formaldehyde emissions were estimated based on DEQ emission factors and found to be in compliance for this reporting period.
3.6	Boiler must comply with condition 2.7. Opacity from point sources must be less than 20%.	Six (6) excess emissions reports were filed for possible opacity levels exceeding limit.
3.11	On or before March 29, 2010, conduct a compliance test to measure CO emissions from the hog fuel boiler stack.	CO compliance test was completed on schedule.

TIER I SEMIANNUAL MONITORING TABLE

FORM AQ-C5

1 Permit Condition	2 Condition Title / Description	3 Comments
3.12	Before May 2, 2009, conduct a compliance test to measure PM ₁₀ emissions from the hog fuel boiler stack.	PM ₁₀ compliance test was completed on schedule.
3.13	Monitor and record the average hourly steam production rate over any consecutive 24-hour period to demonstrate compliance with steaming rate limit of not more than 69,380 pounds of steam per hour averaged over any consecutive 24-hour period.	Steam monitoring data recorded. No deviations from the permitted maximum steaming rate this reporting period.
3.14	Measure pressure drop EFB Baghouse - maintain within manufacturer's specifications	Weekly readings recorded and within manufacturer's specifications (26 of 26 weeks)
3.16	Monitor and record visible emissions monthly, in accordance with Permit Condition 2.8.	Monthly inspections completed and documented this reporting period (6 of 6).
4.	DRY KILNS (5 TOTAL)	
4.1	PM ₁₀ emissions from the dry kilns vents must not exceed 17.88 tons per any consecutive 12-month period.	PM ₁₀ emissions were estimated based on DEQ-approved emission factors and found to be in compliance for this reporting period.
4.2	VOC emissions from the dry kilns vents must not exceed 175.5 tons per year.	VOC emissions were estimated based on DEQ-approved emission factors and found to be in compliance for this reporting period.
4.3	Formaldehyde emissions from the dry kilns vents must not exceed 0.65 tons per year.	Formaldehyde emissions were estimated based on DEQ-approved emission factors and found to be in compliance for this reporting period.
4.5	Maximum dry kiln lumber throughput must not exceed 325,000 mbdf per any consecutive 12-month period.	Dry kiln lumber throughput was within the limit for the reporting period.
4.6	Monitor and record monthly and annual throughput from the dry kilns to demonstrate compliance with the dry kiln throughput limit.	Dry kiln throughput has been recorded and records maintained as required.
4.7	Monitor and record visible emissions monthly, in accordance with Permit Condition 2.8.	Monthly inspections completed and documented this reporting period (6 of 6).
5.	SAWMILL	
5.1	PM ₁₀ emissions from the sawmill chip bin target box vent shall not exceed 6.27 tons per year.	PM ₁₀ emissions were estimated based on DEQ-approved emission factors and found to be in compliance for this reporting period.
5.2	PM ₁₀ emissions from the sawdust bin target box vent shall not exceed 2.65 tons per year.	PM ₁₀ emissions were estimated based on DEQ-approved emission factors and found to be in compliance for this reporting period.
5.4	The combined throughput of the sawmill chip bin and the sawdust bin shall not exceed 356,906 bone-dry tons per any consecutive 12-month period.	Chip and sawdust bin throughput were estimated based on sawmill production and found to be in compliance for this reporting period.
5.5	The permittee shall monitor and record monthly and annual throughput for the sawmill chip bin and sawdust bins to demonstrate compliance with the throughput limit.	Throughput records are on file.
5.6	Monitor and record visible emissions monthly, in accordance with Permit Condition 2.8.	Monthly inspections completed and documented this reporting period (6 of 6).

TIER I SEMIANNUAL MONITORING TABLE

FORM AQ-C5

6.	HOG FUEL CYCLONE	
6.1	PM ₁₀ emissions from the hog fuel cyclone shall not exceed 1.49 tons per any consecutive 12-month period.	The hog fuel cyclone has been removed, as reported in correspondence with DEQ.
6.6	Monitor and record the pressure drop across the hog fuel cyclone once per week while the hog fuel cyclone is operating.	The hog fuel cyclone has been removed, as reported in correspondence with DEQ.
6.7	Monitor and record visible emissions monthly, in accordance with Permit Condition 2.8.	The hog fuel cyclone has been removed, as reported in correspondence with DEQ.
7.	INSIGNIFICANT ACTIVITIES	
8.	GENERAL PROVISIONS	

TIER I SEMIANNUAL DEVIATION SUMMARY TABLE

FORM AQ-C3

Facility/Permittee Name: Idaho Forest Group -- Chilco
 Facility Location: 4447 E. Chilco Road, Athol, Idaho
 AIRS Facility No.: 055-00024

Tier I Operating Permit No.: TI-2008.0202
 Issuance Date: May 2, 2008, Mod. Oct. 5, 2009
 Compliance Reporting Period: 1/1/12 through 6/30/12

1 No.	2 Permit Condition	3 Emissions Unit	4 Deviation	5 Time Began		6 Time Ended		7 Date DEQ Notified	8 Cause	9 Corrective Action & Preventative Measures	10 Attachment
				Date	Hour	Date	Hour				
1	2.7, 3.6	Kipper & Sons hog fuel fired boiler/EFB	Visible Emissions (Opacity) may have exceeded 20% for more than 3 minutes a 60 minute period.	2/2/12	22:00	2/2/12	23:00	2/2/12	Boiler was down due to EFB plug-up. Camp fire was started at 9 pm, EFB was turned on at 11 pm.	The boiler and EFB were brought to proper operating pressure and temperature as quickly as safely possible in order to minimize the duration and severity of any excess opacity.	
1	2.7, 3.6	Kipper & Sons hog fuel fired boiler/EFB	Visible Emissions (Opacity) may have exceeded 20% for more than 3 minutes a 60 minute period.	2/20/12	16:00	2/20/12	18:00	2/21/12	Boiler was down due to EFB plug-up. Camp fire was started at 4 pm, EFB was turned on at 6 pm.	The boiler and EFB were brought to proper operating pressure and temperature as quickly as safely possible in order to minimize the duration and severity of any excess opacity.	
1	2.7, 3.6	Kipper & Sons hog fuel fired boiler/EFB	Visible Emissions (Opacity) may have exceeded 20% for more than 3 minutes a 60 minute period.	3/22/12	10:30	3/22/12	17:00	3/23/12	Boiler was down due to scheduled change of ID fan motor. Camp fire was started at 4:30 pm, EFB was turned on at 8 pm.	The boiler and EFB were brought to proper operating pressure and temperature as quickly as safely possible in order to minimize the duration and severity of any excess opacity.	
1	2.7, 3.6	Kipper & Sons hog fuel fired boiler/EFB	Visible Emissions (Opacity) may have exceeded 20% for more than 3 minutes a 60 minute period.	4/13/12	16:30	4/13/12	20:00	4/14/12	Boiler was down due to scheduled change of ID fan motor. Camp fire was started at 4:30 pm, EFB was turned on at 8 pm.	The boiler and EFB were brought to proper operating pressure and temperature as quickly as safely possible in order to minimize the duration and severity of any excess opacity.	
1	2.7, 3.6	Kipper & Sons hog fuel fired boiler/EFB	Visible Emissions (Opacity) may have exceeded 20% for more than 3 minutes a 60 minute period.	5/18/12	12:30	5/18/12	18:00	5/19/12	Boiler was down due to maintenance on EFB baghouse. Camp fire was started at 12:30 pm, EFB was turned on at 6 pm.	The boiler and EFB were brought to proper operating pressure and temperature as quickly as safely possible in order to minimize the duration and severity of any excess opacity.	

TIER I SEMIANNUAL DEVIATION SUMMARY TABLE

FORM AQ-C3

1 No.	2 Permit Condition	3 Emissions Unit	4 Deviation	5 Time Began		6 Time Ended	7 Date DEQ Notified	8 Cause	9 Corrective Action & Preventative Measures	10 Attachment
1	2.7, 3.6	Kipper & Sons hog fuel fired boiler/EFB	Visible Emissions (Opacity) may have exceeded 20% for more than 3 minutes a 60 minute period.	6/8/12	11:30	6/9/12 1:00	6/11/12	Boiler was down due to maintenance on EFB. Camp fire was started at 4 pm, EFB was turned on at 6 pm.	The boiler and EFB were brought to proper operating pressure and temperature as quickly as safely possible in order to minimize the duration and severity of any excess opacity.	

TIER I SEMIANNUAL REPORT

FORM AQ-C4

FACILITY INFORMATION

Facility/Permittee Name: Idaho Forest Group -- Laclede
Co-Permittee Name(s): NA
Facility Location: 30 Riley Creek Park Drive, Laclede, ID 83841
AIRS Facility No.: 017-00027
Facility Contact: Mke Henley, Superintendent Ph: 208-255-3220 Fax: 208-265-6525

PERMIT AND COMPLIANCE INFORMATION

Tier I Operating Permit No.: T1-2008.0201 Issuance Date: Issued 12/04/07, Modified 01/21/10.
Tier I Operating Permit No.: NA Issuance Date: NA
Compliance Reporting Period: From: Jan. 1, 2012 To: June 30, 2012
Deviations Reported This Period? Yes No

List of Attachments: Semiannual Monitoring Table (Form AQ-C5) No. of Pages: 4
 Semiannual Deviation Summary Table (Form AQ-C3) No. of Pages: 1
 Other: Laclede Narrative Summary Report No. of Pages: 3

No. of Pages: _____

No. of Pages: _____

No. of Pages: _____

No. of Pages: _____

Certification of Truth, Accuracy, and Completeness (by Responsible Official)

I hereby certify that based on information and belief formed after reasonable inquiry, the statements and information contained in this and any attached and/or referenced document(s) are true, accurate, and complete in accordance with IDAPA 58.01.01.123-124.


Responsible Official Signature

CFO
Responsible Official Title

7/25/2012
Date

Kevin Esser
Print or Type Responsible Official Name

Co-Permittee Responsible Official Signature

Co-Permittee Responsible Official Title

Date

Print or Type Co-Permittee Responsible Official Name

TIER I SEMIANNUAL MONITORING TABLE

FORM AQ-C5

Facility/Permittee Name: Idaho Forest Group LLC – Laclede Tier I Operating Permit No.: T1-2008.0201
 Facility Location: 30 Riley Creek Park Drive, Laclede, ID 83841 Issuance Date: 12/04/07, Mod. 1/21/10
 AIRS Facility No.: 017-00027 Compliance Reporting Period: 01/01/12 through 06/30/12

1 Permit Condition	2 Condition Title / Description	3 Comments
1.	TIER I OPERATING PERMIT SCOPE	
2.	FACILITY-WIDE CONDITIONS	
	Fugitive Dust	
2.2	Records of fugitive dust control.	Water truck logs and contract sweeper service invoices kept in Environmental Files.
2.3	Dust complaints.	No dust complaints received this reporting period.
2.4	Monthly facility-wide inspection for fugitive emissions	100% (6 of 6) monthly inspections completed and documented this reporting period.
	Odors	
2.6	Odor complaints.	No odor complaints received this reporting period.
	Visible Emissions	
2.8	Quarterly facility-wide inspection for visible emissions	100% (2 of 2) quarterly inspections completed and documented this reporting period.
	Excess Emissions	
2.9.1	Correct conditions for excess emission events.	Timely and appropriate corrective actions completed.
2.9.2	Excess Emissions – Startup, shutdown or scheduled maintenance excess emissions, corrective action to minimize and reduce recurrence, proper reporting; not allowed during stagnation or wood stove advisories.	100% of excess emission events due to startup, shutdown or scheduled maintenance properly reported to IDEQ. See attached deviation summary table.
2.9.3	Upset, breakdown or safety measures excess emissions.	100% of excess emission events due to upset, breakdown or safety measures, or startup after upset condition properly reported to IDEQ. See attached deviation summary table.
2.9.3.1	Take immediate action to limit or eliminate excess emissions, notify, report & record.	100% of excess emission events given proper response and properly reported to IDEQ. See attached deviation summary table.

TIER I SEMIANNUAL MONITORING TABLE

FORM AQ-C5

1 Permit Condition	2 Condition Title / Description	3 Comments
2.9.3.2	Cease operations at request of Department in the event of excess emission events.	None required during this reporting period.
2.9.4	Written report within 15 days.	100% of excess emission events properly reported in writing within 15 days.
2.9.5	Maintain excess emissions records, startup, shutdown & maintenance procedures.	Air pollution control equipment O&M manuals, excess emission SOPs, written reports with dated & certified return receipts, or hand delivered, in Environmental Files.
	Performance Testing	
2.10	If performance testing is required, must give 15 days advance notice and submit report within 30 days.	No source test required this period.
	Monitoring and Recordkeeping	
2.11	Monitoring and recordkeeping / sufficient to assure compliance	Records maintained in environmental files at least 5 years.
	Reports and Certifications	
2.12	Periodic reports and compliance certifications submitted to IDEQ Coeur d'Alene Regional Office with copy to EPA Region 10.	Periodic reports and compliance certifications submitted on schedule.
	Fuel-burning Equipment	
2.13, 3.1	Particulate matter from fuel-burning (wood products) equipment limited to 0.08 gr/dscf corrected to 8% oxygen by volume.	Most recent stack test results show boilers in compliance with PM limit.
	Sulfur Content	
2.14	Low sulfur fuel used in rolling stock.	Letter from oil supply company certifying that fuel is low sulfur.
2.15	Open Burning	No open burning during this reporting period.
2.16	Renovation/Demolition	No renovation/demolition generating NESHAPS during this reporting period.
2.17	Regulated Substances for Accidental Release Prevention	No regulated substances above threshold planning quantities on site this reporting period.
2.18	Recycling and Emissions Reduction	Idaho Forest Group has complied with standards for recycling and emissions reduction as needed.
3.	Perry Smith ABCO – Wood-fired Boiler #1	

TIER I SEMIANNUAL MONITORING TABLE

FORM AQ-C5

1 Permit Condition	2 Condition Title / Description	3 Comments
3.4	Boiler opacity not to exceed 20% opacity for more than 3 minutes in any 60-minute period.	Boiler #1 had two (2) excess opacity events properly reported to IDEQ, and included as deviations for the semi-annual reporting period 1-1-12 through 06-30-12.
3.12	Record hourly steam production to verify compliance with hourly steam production limit of 55,200 pounds of steam per hour.	100% of required data (minimum of 20 of 24 hourly readings) recorded on circle charts and Boiler Operator logs while boiler was operating. No deviations from the permitted maximum steaming rate this reporting period.
3.13	Compliance test for PM and CO within first year of permit.	Permitted issued 12/04/07. Compliance test performed on September 30, 2008.
3.14, 3.15	Conditions for timing of retest for PM (lb/hr and grain loading)	No additional testing required during this permit term.
3.16	Condition for timing of retest for CO.	No additional testing required during this permit term.
3.17	Monitor and record a minimum of 20 hourly readings of voltage and amperage applied by each ESP T/R set to the discharge electrodes.	100% (at least 20 hours of 24 hours per day) of ESP operating parameters recorded for reporting period while boiler was operating.
3.18	Quarterly visible emission inspection, Permit Condition 2.8	100% (2 of 2) quarterly inspections completed and documented this reporting period.
3.19	Submit summary report of steam production data obtained to satisfy Permit Condition 3.12.	Summary report for this reporting period is attached.
3.20	Report results of compliance testing.	No testing required this period.
3.21	Submit summary report of ESP monitoring data within 30 days of end of reporting period.	Summary reports for this reporting period are attached.
3.22	Submit summary report of visible emissions monitoring data, Permit Condition 3.18.	Summary report for this reporting period is attached.
4.	Kipper and Sons – Wood-fired Boiler #2	
4.4	Boiler opacity not to exceed 20% opacity for more than 3 minutes in any 60-minute period.	Boiler #2 had two (2) excess opacity events properly reported to IDEQ, and included as deviations for the semi-annual reporting period 1-1-12 through 06-30-12.
4.13	Record hourly steam production to verify compliance with hourly steam production limit of 50,000 pounds of steam per hour.	100% of required data (minimum of 20 of 24 hourly readings) recorded on circle charts and Boiler Operator logs while boiler was operating. No deviations from the permitted maximum steaming rate this reporting period.
4.14	Compliance test for PM and CO within first year of permit.	Permitted issued 12/4/07. Compliance test performed September 30, 2008.
4.15, 4.16	Conditions for timing of retest for PM (lb/hr and grain loading)	No additional testing required during this permit term.

TIER I SEMIANNUAL MONITORING TABLE

FORM AQ-C5

1 Permit Condition	2 Condition Title / Description	3 Comments
4.17	Condition for timing of retest for CO.	No additional testing required during this permit term.
4.18	Monitor and record a minimum of 20 hourly readings of voltage and amperage applied by each ESP T/R set to the discharge electrodes.	100% (at least 20 hours per day) of ESP operating parameters recorded for reporting period while boiler was operating.
4.19	Quarterly visible emission inspection, Permit Condition 2.8	100% (2 of 2) quarterly inspections completed and documented this reporting period.
4.20	Submit summary report of steam production data obtained to satisfy Permit Condition 4.13.	Summary report for this reporting period is attached.
4.21	Report results of compliance testing.	Results of September 30, 2008 compliance test were reported within 30 days of completion of the test.
4.22	Submit summary report of ESP monitoring data within 30 days of end of reporting period.	Summary report for this reporting period is attached.
4.23	Submit summary report of visible emission monitoring data, Permit Condition 4.19.	Summary report for this reporting period is attached.
5.	Railcar Target Box and Planer Shavings Cyclone Baghouse	
5.8	Monitor and record pressure differential across the planer shavings cyclone baghouse once per day when in operation.	100% of readings completed and documented this reporting period.
5.9	Maintain records of how fugitive emissions are controlled, neighbor complaints, and monthly fugitive inspections.	Fugitive control documented. No neighbor dust complaints this reporting period.
5.10	Quarterly visible emission inspection, Permit Condition 2.8	100% (2 of 2) quarterly inspections completed and documented this reporting period.
5.11	Submit summary report of fugitive emissions records, Permit Condition 5.9.	No fugitive emission reports this reporting period.
5.12	Submit summary report of pressure differential records, Permit Condition 5.8.	Summary report for this reporting period is attached.
5.13	Submit summary reports of visible emissions records, Permit Condition 5.10.	100% (2 of 2) quarterly inspections completed and documented this reporting period.
6.	Miscellaneous Sources	
7.1 to 7.9	Compliance Assurance Monitoring	Complied with CAM requirements.
8.	Insignificant Activities	
9., cond. 14	General Provisions, Renewal	Complete renewal application submitted before June 4, 2012.

TIER I SEMIANNUAL DEVIATION SUMMARY TABLE

FORM AQ-C3

Facility/Permittee Name: Idaho Forest Group LLC - Laclede
 Facility Location: 30 Riley Creek Park Drive, Laclede, ID 83841
 AIRS Facility No.: 017-00027

Tier I Operating Permit No.: T1-2008.0201
 Issuance Date: 12/04/07, Mod. 01/21/10
 Compliance Reporting Period: 01/01/12 through 06/30/12

1 No.	2 Permit Condition	3 Emissions Unit	4 Deviation	5 Time Began		6 Time Ended		7 Date DEQ Notified	8 Cause	9 Corrective Action & Preventative Measures	10 Attachment
				Date	Hour	Date	Hour				
1	2.7, 3.4	Perry Smith Abco Boiler #1	Visible Emissions (Opacity) may have exceeded 20% for more than 3 minutes in a 60 minute period.	2/09/12	15:00	2/10/12	3:50	2/10/12	Boiler start up after scheduled maintenance.	The boiler and ESP were brought to proper operating pressure and temperature as quickly as safely possible in order to minimize the duration and severity of any excess opacity.	
2	2.7, 4.4	Kipper and Sons Boiler #2	Visible Emissions (Opacity) may have exceeded 20% for more than 3 minutes in a 60 minute period.	3/12/12	18:30	3/13/12	4:00	3/12/12	Boiler start up after being down for repairs and lack of steam demand.	The boiler and ESP were brought to proper operating pressure and temperature as quickly as safely possible in order to minimize the duration and severity of any excess opacity.	
3	2.7, 4.4	Kipper and Sons Boiler #2	Visible Emissions (Opacity) may have exceeded 20% for more than 3 minutes in a 60 minute period.	5/20/12	19:00	5/21/12	5:30	5/21/12	Boiler start up after being down from lack of steam demand.	The boiler and ESP were brought to proper operating pressure and temperature as quickly as safely possible in order to minimize the duration and severity of any excess opacity.	
4	2.7, 3.4	Perry Smith Abco Boiler #1	Visible Emissions (Opacity) may have exceeded 20% for more than 3 minutes in a 60 minute period.	6/10/12	20:00	6/11/12	5:00	6/11/12	Boiler start up after being down for scheduled maintenance.	The boiler and ESP were brought to proper operating pressure and temperature as quickly as safely possible in order to minimize the duration and severity of any excess opacity.	

IDAHO FOREST GROUP LLC, LACLEDE, ID – Tier I Operating Permit #T1-2008.0201

First-half Summary Report, January 1 – June 30, 2012

**BOILER NO. 1 – PERRY SMITH ABCO WOOD-FIRED BOILER
BOILER NO. 2 – KIPPER AND SONS WOOD-FIRED BOILER**

Summary of Hourly Steaming Rates – Permit Conditions 3.5, 3.19, 4.5 and 4.20

The permitted steaming rate for the Perry Smith ABCO Wood-fired Boiler #1 is 55,200 pounds of steam per hour, averaged over a three-hour period. The steaming rate allowed by Permit Condition 3.5 was not exceeded during this reporting period. This report fulfills the steam summary report requirement in Permit Condition 3.19.

The permitted steaming rate for the Kipper and Sons Wood-fired Boiler #2 is 50,000 pounds of steam per hour, averaged over a three-hour period. The steaming rate allowed by Permit Condition 4.5 was not exceeded during this reporting period. This report fulfills the steam summary report requirement in Permit Condition 4.20.

The table below lists hours of operation, steam production and maximum 3-hour average steaming rate for each boiler for 2011.

Month	Boiler #1			Boiler #2		
	Hours Operated	Steam Produced (x1000 lb)	Max. 3-hour avg. steam (x1000 lb)	Hours Operated	Steam Produced (x1000 lb)	Max. 3-hour avg. steam (x1000 lb)
January	744	11,647	44.0	744	8,912	24.3
February	584	9,700	41.0	692	9,241	28.7
March	744	12,832	50.0	345	3,759	22.3
April	707	11,924	40.7	0	0	0
May	522	9,593	43.0	261	4,286	25.7
June	475	6,379	36.0	696	9,582	27.3

Summary of ESP Monitoring Data – Permit Conditions 3.21, 4.22 and Section 7.

This report fulfills the ESP monitoring data reporting requirements of Permit Conditions 3.21 and 4.22. Requirements for monitoring electrostatic precipitator (ESP) indicators are contained in Section 7 of the permit, titled Compliance Assurance Monitoring (CAM). The Perry Smith ABCO Wood-fired Boiler #1 is equipped with a three-cell ESP. The ESP for the Kipper and Sons Wood-fired Boiler #2 is a two-cell ESP.

Both boilers are equipped with equipment to continuously measure the voltage and amperage applied by each transformer/rectification (T/R) set to the discharge electrodes

and each ESP field. Boiler operators monitor and record the voltage and amperage applied by each T/R set to the discharge electrodes hourly. The operators are required to record a minimum of 20 hourly readings per day while the boilers are operating. There were no exceptions to the 20 of 24 hour T/R set reading schedule for Boiler #1 or Boiler #2 during this monitoring period.

The CAM plan in Section 7 summarizes all the indicator ranges used to verify that the ESP's are operating correctly. Acceptable voltage and amperage operating ranges were originally identified by the manufacturer, PPC Industries, and included in the O&M Manual for the ESPs. Idaho Forest Group will inform DEQ of any voltage or amperage readings outside the established range; if there are excess emissions, or if excess emissions are expected to occur during scheduled events.

Summary of Visible Emissions Inspections – Permit Conditions 2.8, 3.18, 3.22, 4.19 and 4.23

This report fulfills the reporting requirements of Permit Conditions 3.22 and 4.23. Quarterly visible emissions (VE) inspections were conducted on schedule for point source emissions when the mill was operating.

The point sources surveyed were Boiler #1, Boiler #2, the sawmill filter cyclone, the planer shavings cyclone baghouse, the planer chip bin target box and the planer filter cyclone. No visible emissions were noted.

RAIL CAR TARGET BOX AND PLANER SHAVINGS CYCLONE BAGHOUSE

Summary of Fugitive Emissions Evaluations – Permit Conditions 2.4, 5.9 and 5.11

This report fulfills the reporting requirements of Permit Conditions 5.11. Monthly fugitive emission inspections were conducted each month while the mill was operating. Sources inspected included debarking, bark hog, hogged bark conveying and loading, sawdust conveying and loading, chip conveying and loading, shavings pneumatic conveying and loading, ash bins and roadways. All potential sources of fugitive emissions were found to be reasonably controlled and no excess emissions were observed.

Water truck and contractor sweeping records are maintained in the environmental office files (Permit Condition 2.2). During this reporting period there were no dust complaints from neighbors (Permit Condition 2.3).

Summary of Pressure Differential Records – Permit Conditions 5.8 and 5.12

This report fulfills the reporting requirements of Permit Condition 5.12. Pressure differential at the planer shavings cyclone baghouse was recorded daily during operation. No readings were missed and no parameters were outside specified operating ranges.

Summary of Visible Emissions Evaluations – Permit Conditions 2.8, 5.10 and 5.13

This report fulfills the reporting requirements of Permit Condition 5.13. Quarterly visible emissions (VE) inspections were conducted regularly as required by Permit condition 2.8. There were no visible emissions events to report this reporting period.



Please see instructions on pages 3-8 before filling out the form.

IDENTIFICATION			
1. Company Name:	Idaho Forest Group LLC	2. Facility Name:	IFG – Chilco
3. Facility ID No.:	055-00024		
4. Brief Project Description:	CAM monitoring conditions for Tier I permit renewal.		

MONITORING APPROACH SUBMITTAL

Background		
5. Emissions Unit	Description (type of emission point): Hog Fuel Boiler	Identification (emission point number): Hog Fuel Boiler, EU#1
6. Applicable Regulation, Limits, and Requirements	Applicable regulation citation: IDAPA 58.01.01.677 /PTC NO. P-050116 Tier I T1-2009.0123	Pollutant: PM Emission limit: 0.200 gr/dscf @ 8% oxygen Pollutant: PM Emission limit: 6.93 lb/hr and 30.4 tpy Monitoring requirements: NSPS does not apply, so there are no regulatory monitoring requirements.
7. Control Technology	Brief description: Multiclone, followed by an electrified filter bed (EFB) with a media-cleaning baghouse.	

Table 1. Monitoring Approach			
	Indicator No. 1	Indicator No. 2	Indicator No. 3
I. Indicator Description	Ionizer Current	Ionizer Voltage	Filter Bed Voltage
Measurement Approach	Continuous current monitor (ammeter) with operator readout for each tower.	Continuous voltage monitor (voltmeter) with operator readout for each tower.	Continuous voltage monitor (voltmeter) with operator readout for each tower.
II. Indicator Range (Quality improvement plan threshold optional)	0 to 2.5 milliamps (mA)	10 to 40 kilovolts (kV)	10 to 40 kilovolts (kV)
III. Performance Criteria	_____	_____	_____
A. Data Representativeness	The current is measured using instrumentation provided by the EFB manufacturer and used as per design.	The voltage is measured using instrumentation provided by the EFB manufacturer and used as per design.	The voltage is measured using instrumentation provided by the EFB manufacturer and used as per design.
B. Verification of Operational Status	Verify that the ammeter is properly calibrated following any repair or maintenance.	Verify that the voltmeter is properly calibrated following any repair or maintenance.	Verify that the voltmeter is properly calibrated following any repair or maintenance.
C. QA/QC Practices and Criteria	Confirm that ammeter reads zero when the EFB is not operating.	Confirm that voltmeter reads zero when the EFB is not operating.	Confirm that voltmeter reads zero when the EFB is not operating.
D. Monitoring Frequency	Record hourly. Monitoring is complete if 20 of 24 hours are recorded.	Record hourly. Monitoring is complete if 20 of 24 hours are recorded.	Record hourly. Monitoring is complete if 20 of 24 hours are recorded.
E. Data Collection Procedures	Data is recorded on daily log forms and maintained on-site for 5 years.	Data is recorded on daily log forms and maintained on-site for 5 years.	Data is recorded on daily log forms and maintained on-site for 5 years.
F. Averaging Period	Current reading is instantaneous at the time recorded.	Voltage reading is instantaneous at the time recorded.	Voltage reading is instantaneous at the time recorded.

Table 1. Monitoring Approach, continued			
	Indicator No. 4	Indicator No. 5	Indicator No. 6
I. Indicator Description	Filter Bed Current	Filter Bed Temperature	Media Baghouse Pressure Drop
Measurement Approach	Continuous current monitor (ammeter) with operator readout for each tower.	Filter bed temperature is measured with a thermocouple at the beginning of the outlet plenum, where the gas streams from the two towers combine.	Pressure sensors are located at the inlet and outlet of the baghouse. Pressures are compared using a differential pressure gauge.
II. Indicator Range (Quality improvement plan threshold optional)	0 to 0.35 milliamps (mA)	≥ 150 °F	0 – 6.0 inches water column (" w.c.)
III. Performance Criteria	_____	_____	_____
A. Data Representativeness	The current is measured using instrumentation provided by the EFB manufacturer and used as per design.	Temperature equalizes within the EFB towers and gas exiting the filter beds has essentially the same temperature as the beds.	Pressure differential (pressure drop) across the baghouse may indicate air flow is bypassing the bags (low ΔP) or is obstructed (high ΔP).
B. Verification of Operational Status	Verify that the ammeter is properly calibrated following any repair or maintenance.	Verify that the thermocouple is properly calibrated following any repair or maintenance.	Verify that the pressure sensors are in place
C. QA/QC Practices and Criteria	Confirm that ammeter reads zero when the EFB is not operating.	Confirm that thermocouple temperature approaches ambient temperature when the EFB is not operating.	Confirm that the pressure differential gauge reads zero when air is not flowing through the baghouse.
D. Monitoring Frequency	Record hourly. Monitoring is complete if 20 of 24 hours are recorded.	Record hourly. Monitoring is complete if 20 of 24 hours are recorded.	Record once per day.
E. Data Collection Procedures	Data is recorded on daily log forms and maintained on-site for five years.	Data is recorded on daily log forms and maintained on-site for five years.	Data is recorded on daily log forms and maintained on-site for five years.
F. Averaging Period	Current reading is instantaneous at the time recorded.	Temperature reading is instantaneous at the time recorded.	Pressure differential reading is instantaneous at the time recorded.

Table 1. Monitoring Approach, continued			
	Indicator No. 7		
I. Indicator Description	Visible Emissions		
Measurement Approach	Observation of visible emissions		
II. Indicator Range (Quality improvement plan threshold optional)	If visible emissions are present, corrections are made.		
III. Performance Criteria	—		
A. Data Representativeness	Under normal operations, emissions from the baghouse are not visible. If visible emissions are noted, it may indicate operational problems with the baghouse.		
B. Verification of Operational Status	Not applicable.		
C. QA/QC Practices and Criteria	Not applicable.		
D. Monitoring Frequency	Quarterly.		
E. Data Collection Procedures	Quarterly observations are included in the quarterly monitoring report.		
F. Averaging Period	Visible emissions observations are instantaneous at the time made.		

Justification	<p>Present justification for selection of monitoring approach(es) and indicator range(s):</p> <p>Justification for Indicator 1: The current on the ionizer provides an indicator of the voltage. A decrease in current could indicate a malfunction, such as a buildup of PM or condensed hydrocarbons on the ionizer.</p> <p>Justification for Indicator 2: The voltage indicates that a corona is formed and is generating ions for charging particles.</p> <p>Justification for Indicator 3: The voltage on the gravel must be maintained so charged PM is attracted to the gravel. A decrease in voltage could indicate a malfunction, such as a short or a buildup of PM or condensed hydrocarbons on the gravel.</p> <p>Justification for Indicator 4: A sudden increase in bed current with no corresponding increase in bed voltage or with a bed voltage at zero indicates a short in the filter bed.</p> <p>Justification for Indicator 5: Filter bed temperature needs to be high enough to ensure that water in the gas stream does not condense. Moisture condensation in the filter bed can result in an electrical short, and contribute the buildup of hydrocarbon glaze on the ionizer or the gravel. This buildup interferes with the corona charging of the ionizer and the electrode charging of the filter bed.</p> <p>Justification for Indicator 6: Pressure differential from the inlet to the outlet of the baghouse (pressure drop) is an indicator of resistance within the baghouse. If the pressure drop is below the normal operating range, it may indicate a leak allowing air to bypass the filter bags. If the pressure drop is above the normal operating range, it may indicate that the flow has become obstructed in some way.</p> <p>Justification for Indicator 7: Under normal operations, emissions from the baghouse are not visible. Therefore, visible emissions may indicate a problem within the baghouse.</p>
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**IDAHO FOREST GROUP
CHILCO, IDAHO
Emission Inventory/Calculations**

PTE Inventory, Revised November 14, 2012, Natural Gas Boiler Added November 30, 2012

Fugitive Sources	PM10 (ton/yr)	PM2.5 (ton/yr)	SO2 (ton/yr)	NOx (ton/yr)	VOCs (ton/yr)	CO (ton/yr)	HAPS (ton/yr)
Log and Bark Handling, Fugitives							
DEBARKER	3.22	0.97	---	---	---	---	---
BARK HOG	0.59	0.18	---	---	---	---	---
COVERED BARK CONVEYOR	0.59	0.18	---	---	---	---	---
HOGGED FUEL DROP IN FUEL HOUSE	0.94	0.28	---	---	---	---	---
HOGGED FUEL TRUCK BIN LOADOUT	0.59	0.18	---	---	---	---	---
Sawmill, Fugitives							
SAWMILL, INDOOR	1.17	0.12	---	---	---	---	---
SAWMILL SCREEN (CLASSIFIER), INDOOR	0.63	0.06	---	---	---	---	---
SAWMILL CHIPPER, INDOOR	0.63	0.19	---	---	---	---	---
SAWDUST BIN TRUCK LOADOUT	1.33	0.40	---	---	---	---	---
SAWMILL CHIP BIN TRUCK LOADOUT	3.13	0.94	---	---	---	---	---
Planer, Fugitives							
PLANER CHIPPER AND SCREEN	0.13	0.04	---	---	---	---	---
PLANER CHIP BIN TRUCK LOADOUT	1.25	0.38	---	---	---	---	---
PLANER SHAVINGS BIN TRUCK LOADOUT	1.50	0.45	---	---	---	---	---
Fugitive Road Dust							
FUGITIVE DUST - PAVED ROADS	0.49	0.12	---	---	---	---	---
Fugitive Totals	16.16	4.46	0.00	0.00	0.00	0.00	0.00
Point Sources							
Lumber Drying							
LUMBER DRY KILNS	3.25	1.63	---	---	175	---	31.2
Sawmill Point Sources							
SAWMILL CHIP BIN VENT - POINT SOURCE	6.27	1.88	---	---	---	---	---
SAWDUST BIN VENT - POINT SOURCE	2.65	0.80	---	---	---	---	---
FIREWATER PUMP	0.08	0.08	0.08	1.19	0.10	0.26	0.002
Planer Point Sources							
PLANER CHIPPER TARGET BOX - POINT SOURCE	1.25	0.38	---	---	---	---	---
PLANER SHAVINGS CYCLONE BAGHOUSE - POINT SOURCE	5.44	1.63	---	---	---	---	---
Steam Plant							
HOG FUEL BOILER	30.4	27.3	12.1	106	29.9	238	19.3
EFB MEDIA BAGHOUSE	1.0	1.0	---	---	---	---	---
NATURAL GAS BOILER (BRC)	1.5	1.5	0.12	7.39	1.09	7.50	0.37
Point Source Totals	52	36	12	115	206	246	50.9
Plant Wide Total	68.0	40.7	12.26	115	206	246	50.9

Greenhouse Gas, plantwide, excludes biogenic CO₂: 28,000 metric ton equivalent CO₂

IDAHO FOREST GROUP - CHILCO
Emission Inventory/Calculations

PTE Emissions

Lumber Production		
Sawmill	325,000	mbdft/year
Dry Kilns	325,000	mbdft/year
Planer	325,000	mbdft/year
Logs Used	1,170,000	tons/year
Sawmill Hours	8,760	hours/year, est
Planer Hours	8,760	hours/year

Hog Fuel Boiler	607,594	1000 lbs/yr Steam Produced
Natural Gas Boiler	395	mmscf gas burned

Residuals Production			
	tons/year	Estimation Factor	
Sawmill Chips	250,792	Permit	lb chips/mbdft sawmill
Sawdust	106,144	Permit	lb sawdust/mbdft sawmill
Hog Bark	234,000	400	lb bark/ton logs
Planer Chips	50,000	Permit	lb chips/mbdft planer
Shavings	120,000	Permit	lb shavings/mbdft planer

KIPPER & SONS HOG FUEL BOILER

Controlled by EFB

69.36 1000 lb steam/hr
23,551 dscfm @ 0% O2 (stack test)
37,100 dscfm @ 8% O2, max
8,760 Hours/Year, potential
125 mmBtu/hr maximum
607,594 1000 lb steam/year
964,859 mmBtu/year

Permit Limit, 24-hour average

CRITERIA POLLUTANTS

PM (controlled):
Emission Factor: 0.08 gr/dscf @ 8% Oxygen
Emissions: 111.4 tons/year
610.6 lbs/day
25.44 lbs/hr

Regulatory Limit
Potential Hours
Potential Emissions

PM10 (controlled):
Emissions: 30.4 tons/year
166.3 lbs/day
6.93 lbs/hr

Permit Limit
Permit Limit

PM2.5 (controlled):
Emissions: 27.3 tons/year
149.7 lbs/day
6.24 lbs/hr

PM2.5 is 90% of PM10
Based on AP-42, Table 1.6-1

Sulfur Dioxide:
Emission Factor: 0.025 lb/mmBtu
Emissions: 12.06 tons/year
75.00 lbs/day
3.13 lbs/hr

(AP-42 TABLE 1.6-2, Rev 9/03)
Actual based on mmBtu/yr

Nitrogen Oxides (NOx)
Emission Factor: 0.22 lb/mmBtu
Emissions: 106.13 tons/year
660.0 lbs/day
27.50 lbs/hr

(AP-42 TABLE 1.6-2, Rev 9/03)
Actual based on mmBtu/yr

Volatile Organic Compounds (VOC)
Emission Factor: 0.062 lb/mmBtu
Emissions: 29.91 tons/year
186.0 lbs/day
7.75 lbs/hr

Value from air quality
for this boiler when it was at
Sandpoint

Carbon Monoxide (CO)
Emission Factor: 0.7845 lb/1000 lb steam
Emissions: 238.33 tons/year
2073.8 lbs/day
54.41 lbs/hr

As permitted in the 2004 original permit.
Source test result was 0.59 lb/1000 lb steam

Lead (Pb)
Emission Factor: 4.80E-05 lb/mmBtu
Emissions: 2.32E-02 tons/year
1.44E-01 lbs/day
6.00E-03 lbs/hr

(AP-42 TABLE 1.6-4, Rev 9/03)

EFB MEDIA BAGHOUSE

5000 scf/min

Baghouse design flow.

PM10/PM2.5 :
Emission Factor: 0.0054 gr/dscf
Emissions: 1.0 tpy
5.55 lbs/day
0.23 lb/hr

Baghouse design emission rate.
Permit Limit
Assumed to be all PM2.5
Permit Limit

The uncontrolled emissions from this source are not known, therefore this is not defined as an insignificant source.

**IDAHO FOREST GROUP - CHILCO BOILER
HAZARDOUS AIR POLLUTANTS (HAPS)**

Operating Parameters:

Potential Hours of Operation

8,760 hours/yr

Annual Boiler Heat Input, actual

964,859 mmBtu /yr

Emission Factors:		
AP-42 Ch.1.6, Tables 1.6-3 and 1.6-4 (9/03)	Emission Factor (lb/mmBtu)	Total Annual Emissions (tons/yr)
Acetaldehyde	8.3E-04	4.00E-01
Acetophenone	3.2E-09	1.54E-06
Acrolein	4.0E-03	1.93E+00
Benzene	4.2E-03	2.03E+00
Benzo(a)pyrene	2.6E-06	1.25E-03
bis(2-ethylhexyl)phthalate	4.7E-08	2.27E-05
Bromomethane (methyl bromide)	1.5E-05	7.24E-03
2-Butanone (MEK)	5.4E-06	2.61E-03
Carbon tetrachloride	4.5E-05	2.17E-02
Chlorine	7.9E-04	3.81E-01
Chlorobenzene	3.3E-05	1.59E-02
Chloroform	2.8E-05	1.35E-02
Chloromethane (Methyl Chloride)	2.3E-05	1.11E-02
1,2-Dichloroethane	2.9E-05	1.40E-02
Dichloromethane (Methylenechloride)	2.9E-04	1.40E-01
1,2-Dichloropropane (Propylene dichloride)	3.3E-05	1.59E-02
Ethylbenzene	3.1E-05	1.50E-02
Formadehyde (Permit Limit = 2.41 tpy)	4.4E-03	2.12E+00
Hydrogen chloride	1.9E-02	9.17E+00
Methanol (from ODEQ)	1.4E-03	6.75E-01
Naphthalene	9.7E-05	4.68E-02
4-Nitrophenol	1.1E-07	5.31E-05
Pentachlorophenol	5.1E-08	2.46E-05
Phenol	5.1E-05	2.46E-02
Polycyclic Organic Matter (POM)	2.9E-06	1.39E-03
Benzo(a)anthracene	6.5E-08	
Benzo(a)pyrene	2.6E-06	
Benzo(b)fluoranthene	1.0E-07	
Benzo(k)fluoranthene	3.6E-08	
Indeno(1,2,3,cd)pyrene	8.7E-08	
Styrene	1.9E-03	9.17E-01
2,3,7,8-Tetrachlorodibenzo-p-dioxins	8.6E-12	4.15E-09
Toluene	9.2E-04	4.44E-01
1,1,1-Trichloroethane (Methyl Chloroform)	3.1E-05	1.50E-02
2,4,6-Trichlorophenol <	2.2E-08	1.06E-05
Vinyl Chloride	1.8E-05	8.68E-03
o-Xylene	2.5E-05	1.21E-02
Antimony	7.9E-06	3.81E-03
Arsenic	2.2E-05	1.06E-02
Beryllium	1.1E-06	5.31E-04
Cadmium	4.1E-06	1.98E-03
Chromium, total	2.1E-05	1.01E-02
Chromium, hexavalent	3.5E-06	1.69E-03
Cobalt	6.5E-06	3.14E-03
Lead	4.8E-05	2.32E-02
Manganese	1.6E-03	7.72E-01
Mercury	3.5E-06	1.69E-03
Nickel	3.3E-05	1.59E-02
Selenium	2.8E-06	1.35E-03
TOTAL HAPS		19.27

NATURAL GAS BOILER (BRC)
PACKAGE BOILER

6,678 dscfm @ 0% O₂, f-factor
 1,056 lbmol/hr @ 0% O₂
 8,760 Hours/Year
 40,000 pph steam
 46 mmBtu/hr, accounts for heat recovery
 1,020 btu/cf gas
 45,098 scfh gas, based on heat input

CRITERIA POLLUTANTS

PM/PM10/PM2.5 (controlled):		
Emission Factor:	7.6 lb/mmscf	(AP-42 TABLE 1.4-2, Rev 7/98)
Emissions:	1.50 tons/year	
	8.23 lbs/day	
	0.34 lbs/hr	
Sulfur Dioxide:		
Emission Factor:	0.6 lb/mmscf	(AP-42 TABLE 1.4-2, Rev 7/98)
Emissions:	0.12 tons/year	
	0.65 lbs/day	
	0.03 lbs/hr	
Nitrogen Oxides (NOx)		
Emission Rate:	30 ppm @ 3% O ₂	Manufacturer
Emissions:	7.39 tons/year	Low-NOx burner
	40.52 lbs/day	
	1.69 lbs/hr	
Volatile Organic Compounds (VOC)		
Emission Factor:	5.5 lb/mmscf	(AP-42 TABLE 1.4-2, Rev 7/98)
Emissions:	1.09 tons/year	
	5.95 lbs/day	
	0.25 lbs/hr	
Carbon Monoxide (CO)		
Emission Factor:	50 ppm @ 3% O ₂	Manufacturer
Emissions:	7.50 tons/year	
	41.11 lbs/day	
	1.71 lbs/hr	
Lead (Pb)		
Emission Factor:	5.00E-04 lb/mmscf	(AP-42 TABLE 1.4-2, Rev 7/98)
Emissions:	9.88E-05 tons/year	
	5.41E-04 lbs/day	
	2.25E-05 lbs/hr	

Chilco Natural Gas Boiler

Operating Parameters:

Potential Hours of Operation	8,760 hours/yr
Max Heat Input	46.0 MMBtu / hr
Annual Boiler Heat Input	402,960 MMBtu / yr
	0.045 mmscf/hr

Emission Factors:			Potential Emissions:		
AP-42 Ch.1.4, Tables 1.4-3 and 1.4-4 (7/98) emission factors	HAP (y/n)	TAP Class (A/B)	Emission Factor (lb/MMBtu)	Potential Emissions (lb/hr)	Total Annual (tons/yr)
Acenaphthene	y		1.8E-09	8.12E-08	3.56E-07
Acenaphthylene	y		1.8E-09	8.12E-08	3.56E-07
Anthracene	y		2.4E-09	1.08E-07	4.74E-07
Benzene	y	A	2.1E-06	9.47E-05	4.15E-04
Benzo(a)pyrene	y	A	1.2E-09	5.41E-08	2.37E-07
Benzo(g,h,i)perylene	y		1.2E-09	5.41E-08	2.37E-07
7,12-Dimethylbenz(a)anthracene	y		1.6E-08	7.22E-07	3.16E-06
Dichlorobenzene	y		1.2E-06	5.41E-05	2.37E-04
Fluoranthene	y		2.9E-09	1.35E-07	5.93E-07
Fluorene	y		2.7E-09	1.26E-07	5.53E-07
Formaldehyde	y	A	7.4E-05	3.38E-03	1.48E-02
Hexane	y	B	1.8E-03	8.12E-02	3.56E-01
2-Methylnaphthalene	y		2.4E-08	1.08E-06	4.74E-06
3-Methylchloranthrene	y		1.8E-09	8.12E-08	3.56E-07
Naphthalene	y	B	6.0E-07	2.75E-05	1.20E-04
Phenanthrene	y		1.7E-08	7.67E-07	3.36E-06
Pyrene	y		4.9E-09	2.25E-07	9.88E-07
Polycyclic Organic Matter (POM)	y	A	1.2E-08	5.41E-07	2.37E-06
Benzo(a)anthracene			1.8E-09		
Benzo(a)pyrene			1.2E-09		
Benzo(b)fluoranthene			1.8E-09		
Benzo(k)fluoranthene			1.8E-09		
Chrysene			1.8E-09		
Dibenzo(a,h)anthracene			1.8E-09		
Indeno(1,2,3-cd)pyrene			1.8E-09		
Toluene	y	B	3.3E-06	1.53E-04	6.72E-04
Arsenic	y	A	2.4E-04	1.08E-05	4.74E-05
Beryllium	y	A	1.2E-08	5.41E-07	2.37E-06
Cadmium	y	A	1.1E-06	4.96E-05	2.17E-04
Chromium	y	A	1.4E-07	6.31E-06	2.77E-05
Cobalt	y	B	8.2E-08	3.79E-06	1.66E-05
Manganese	y	B	3.7E-07	1.71E-05	7.51E-05
Mercury	y	B	2.5E-07	1.17E-05	5.14E-05
Nickel	y	A	2.1E-06	9.47E-05	4.15E-04
Selenium	y	B	2.4E-08	1.08E-06	4.74E-06
			TOTAL HAPS		0.37
Pentane	n	B	2.8E-03	1.31E-01	5.73E-01
Barium	n	B	4.3E-06	1.98E-04	8.69E-04
Copper	n	B	8.3E-07	3.83E-05	1.68E-04
Molybdenum	n	B	1.1E-06	4.96E-05	2.17E-04
Zinc	n	B	2.8E-05	1.31E-03	5.73E-03

LUMBER DRY KILNS

325,000 mbdft/yr, lumber dried

CRITERIA POLLUTANTS

PM10 :	Emission Factor:	0.02 lbs/1000 bd.ft.	Oregon General Permit
	Emissions:	3.25 tons/year	AQGP-010
		17.81 lbs/day	
PM2.5 :	Emission Factor:	0.01 lbs/1000 bd.ft.	Assume PM2.5 is 50% of PM10
	Emissions:	1.63 tons/year	PM10 is based on AQGP-010
		8.90 lbs/day	
VOC:	Emission Factor:	1.08 lbs/1000 bd.ft.	Sources listed below
	Emissions:	175.0 tons/year	Permit Limit is 175.5 tpy
		959 lbs/day	

VOC emissions based on species-dependent weighted emission factor, using information below. Species mix is typical

Wood Species:	% of Total	VOC as VOC (lb/MBdft)	Weighted (lb/Mbdft)	Source of Emission Factor
Redwood	0%	0.15	0.00	1996 U of I Study
Cedar	0%	0.15	0.00	1996 U of I Study
Douglas Fir	40%	1.03	0.41	2007 OSU Study
Hem Fir	40%	0.70	0.28	2007 OSU Study
Hemlock	0%	0.25	0.00	2007 OSU Study
ESLP	9%	1.32	0.12	2000 OSU Study
Larch	0%	0.25	0.00	2007 OSU Study
AF(WW)	0%	0.70	0.00	2007 OSU Study
Ponderosa Pine	11%	2.46	0.26	2007 OSU Study
Total	100%		1.08	

Riley Creek - Chilco
 Dry Kiln Haps

EMISSIONS YEAR	PTE
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* white wood is Engleman spruce, white fir, etc.

ENTER	
Total MBF processed	325,000
% Douglas Fir /Larch	40.0%
% Hem Fir	40.0%
% Ponderosa Pine	10.6%
% ESLP	9.4%
% Cedar	0.0%
% AF (WW)	0.0%
	100%

130,000 MBF/Yr by species calculated by Total MBF * % species
 130,000
 34,450
 30,550
 0
 0
 325,000

EMISSION FACTORS: units of pounds per thousand board feet (lb/mbf)						
Pollutant	Total HAP	Methanol	Formal- dehyde	Acetal- dehyde	Propion- aldehyde	Acrolein
Douglas Fir / Larch	0.1700	0.0964	0.0033	0.0687	0.0007	0.0009
Hem Fir	0.2500	0.1328	0.0030	0.1039	0.0084	0.0018
Pinderosa Pine	0.1483	0.1021	0.0067	0.0334	0.0027	0.0034
ESLPAF	0.0915	0.0539	0.0030	0.0333	0.0005	0.0008
Cedar	0.0915	0.0539	0.0030	0.0333	0.0005	0.0008
AF (WW)	0.2500	0.1328	0.0030	0.1039	0.0084	0.0018

EMISSIONS units of pounds per year (lb/yr)						
Species	Total HAP	Methanol	Formal- dehyde	Acetal- dehyde	Propion- aldehyde	Acrolein
Douglas Fir / Larch	22098	12536	425	8933	93	111
Hem Fir	32497	17262	396	13511	1090	239
Pinderosa Pine	5108	3517	231	1150	93	118
ESLP	2794	1647	91	1016	16	24
Cedar	0	0	0	0	0	0
AF (WW) or Other	0	0	0	0	0	0
TOTAL, lb/yr	62,498	34,961	1,143	24,610	1,292	492
TOTAL, ton/yr	31.25	17.48	0.57	12.31	0.65	0.25

Permit Limit
 is 0.65 tpy

LOGS AND BARK, FUGITIVE EMISSIONS

DEBARKER

1,170,000 Tons of Logs/Year
8,760 Hours/Year

Spray is used as needed to control dust emissions.
Spray is estimated to provide 50% control.

PM10:	Emission Factor:	0.011 lbs/ton	AIRS 3-07-008-01
	Control:	50% spray bars	
	Emissions:	3.22 tons/year	
		17.63 lbs/day	
PM2.5:	Emission Factor:	0.0033 lbs/ton	30% of PM10 for material handling sources
	Control:	50% spray bars	Based on data from EPA's PM Claculator
	Emissions:	0.97 tons/year	
		5.29 lbs/day	

BARK HOG

Insignificant based on total emissions. 234,000 Tons of Bark/Year

PM10:	Emission Factor:	0.05 lbs/ton	General Material Handling Factor
	Emissions:	0.59 tons/year	Based on original Chilco permit from IDEQ
		3.21 lbs/day	Bark Hog is enclosed, 90% control.
PM2.5:	Emission Factor:	0.015 lbs/ton	30% of PM10 for material handling sources
	Control:	0.18 tons/year	Based on data from EPA's PM Claculator
	Emissions:	0.96 lbs/day	

COVERED BARK CONVEYOR

PM10:	Emission Factor:	0.05 lbs/ton	General Material Handling Factor
	Emissions:	0.59 tons/year	Based on original Chilco permit from IDEQ
		3.21 lbs/day	Fully covered conveyor provides 90% control
PM2.5:	Emission Factor:	0.015 lbs/ton	30% of PM10 for material handling sources
	Control:	0.18 tons/year	Based on data from EPA's PM Claculator
	Emissions:	0.96 lbs/day	

HOGGED FUEL DROP IN FUEL HOUSE

Approx. 80% of fuel goes to fuel house.

PM10:	Emission Factor:	0.05 lbs/ton	General Material Handling Factor
	Emissions:	0.94 tons/year	Based on original Chilco permit from IDEQ
		5.13 lbs/day	Fuel house has 3 sides providing 80% control
PM2.5:	Emission Factor:	0.015 lbs/ton	30% of PM10 for material handling sources
	Control:	0.28 tons/year	Based on data from EPA's PM Claculator
	Emissions:	1.54 lbs/day	

HOGGED FUEL TRUCK BIN LOADOUT

Approx. 20% of fuel goes to hog fuel bins.

PM10:	Emission Factor:	0.05 lbs/ton	General Material Handling Factor
	Emissions:	0.59 tons/year	Based on original Chilco permit from IDEQ
		3.21 lbs/day	Bin has sides panels to block wind, 50% control.
PM2.5:	Emission Factor:	0.015 lbs/ton	30% of PM10 for material handling sources
	Control:	0.18 tons/year	Based on data from EPA's PM Claculator
	Emissions:	0.96 lbs/day	

SAWMILL PROCESSES

SAWMILL, INDOOR

Insignificant based on total emissions. 1,170,000 Tons of Logs/Year

PM10:		
Emission Factor:	0.2 lbs/ton	Idaho Factor
Controlled EF:	0.002 lbs/ton	Indoors with pneumatic dust pickup.
Emissions:	1.17 tons/year	99% removal efficiency.
	6.41 lbs/day	
PM25:		
Emission Factor:	0.02 lbs/ton	30% of PM10 for material handling sources
Controlled EF:	0.0002 lbs/ton	Based on data from EPA's PM Claculator
Emissions:	0.12 tons/year	Indoors with pneumatic dust pickup.
	0.64 lbs/day	99% removal efficiency.

SAWMILL SCREEN (CLASSIFIER), INDOOR

Insignificant based on total emissions. 250,792 Tons of Chips/Year

PM10:		
Emission Factor:	0.05 lbs/ton	General Material Handling Factor
Controlled EF:	0.005 lbs/ton	Based on original Chilco permit from IDEQ
Emissions:	0.63 tons/year	Enclosed process, 90% control.
	3.44 lbs/day	
PM25:		
Emission Factor:	0.005 lbs/ton	30% of PM10 for material handling sources
Controlled EF:	0.0005 lbs/ton	Based on data from EPA's PM Claculator
Emissions:	0.06 tons/year	Enclosed process, 90% control.
	0.34 lbs/day	

SAWMILL CHIPPER, INDOOR

Insignificant based on total emissions. 250,792 Tons of Chips/Year

PM10:		
Emission Factor:	0.05 lbs/ton	General Material Handling Factor
Controlled EF:	0.005 lbs/ton	Based on original Chilco permit from IDEQ
Emissions:	0.63 tons/year	Enclosed process, 90% control.
	3.44 lbs/day	
PM25:		
Emission Factor:	0.015 lbs/ton	30% of PM10 for material handling sources
Controlled EF:	0.0015 lbs/ton	Based on data from EPA's PM Claculator
Emissions:	0.19 tons/year	Enclosed process, 90% control.
	1.03 lbs/day	

SAWDUST BIN TRUCK LOADOUT

Insignificant based on total emissions. 106,144 Tons of Sawdust/Year

PM10:		
Emission Factor:	0.05 lbs/ton	General Material Handling Factor
Controlled EF:	0.025 lbs/ton	Based on original Chilco permit from IDEQ
Emissions:	1.33 tons/year	Sides of loadout blocked from wind, 50% control.
	7.27 lbs/day	
PM25:		
Emission Factor:	0.015 lbs/ton	30% of PM10 for material handling sources
Controlled EF:	0.0075 lbs/ton	Based on data from EPA's PM Claculator
Emissions:	0.40 tons/year	Sides of loadout blocked from wind, 50% control.
	2.18 lbs/day	

SAWMILL CHIP BIN TRUCK LOADOUT

250,792 Tons of Chips/Year

PM10:		
Emission Factor:	0.05 lbs/ton	General Material Handling Factor
Controlled EF:	0.025 lbs/ton	Based on original Chilco permit from IDEQ
Emissions:	3.13 tons/year	Sides of loadout blocked from wind, 50% control.
	17.18 lbs/day	
PM25:		
Emission Factor:	0.015 lbs/ton	30% of PM10 for material handling sources
Controlled EF:	0.0075 lbs/ton	Based on data from EPA's PM Claculator
Emissions:	0.94 tons/year	Sides of loadout blocked from wind, 50% control.
	5.15 lbs/day	

SAWMILL CHIP BIN VENT - POINT SOURCE

250,792 Tons of Chips/Year

PM10:		
Emission Factor:	0.05 lbs/ton	Idaho DEQ Target Box Factor.
Emissions:	6.27 tons/year	Permit Limit
	34.36 lbs/day	
PM25:		
Emission Factor:	0.015 lbs/ton	30% of PM10 for material handling sources
Emissions:	1.88 tons/year	Based on data from EPA's PM Claculator
	10.31 lbs/day	

SAWDUST BIN VENT - POINT SOURCE

106,144 Tons of Sawdust/Year

PM10:		
Emission Factor:	0.05 lbs/ton	Idaho DEQ Target Box Factor.
Emissions:	2.65 tons/year	Permit Limit
	14.54 lbs/day	
PM25:		
Emission Factor:	0.015 lbs/ton	30% of PM10 for material handling sources
Emissions:	0.80 tons/year	Based on data from EPA's PM Claculator
	4.36 lbs/day	

PLANER PROCESSES

PLANER, INDOOR

There are no emissions from the planers because they are pneumatically controlled through the shavings transport system.

PLANER CHIPPER AND SCREEN

Insignificant based on total emissions.	50,000 Tons of Planer Chips/Year	
PM10 :		
Emission Factor:	0.05 lbs/ ton	General Material Handling Factor
Controlled EF:	0.005 lbs/ton	Based on original Chilco permit from IDEQ
Emissions:	0.13 tons/year	Enclosed process, 90% control.
	0.68 lbs/day	
PM2.5 :		
Emission Factor:	0.015 lbs/ ton	30% of PM10 for material handling sources
Controlled EF:	0.0015 lbs/ton	Based on data from EPA's PM Claculator
Emissions:	0.04 tons/year	Enclosed process, 90% control.
	0.21 lbs/day	

PLANER CHIPPER TARGET BOX - POINT SOURCE

Insignificant based on total emissions.	50,000 Tons of Planer Chips/Year	
PM10 :		
Emission Factor:	0.05 lbs/ ton	Idaho DEQ Factor
Emissions:	1.25 tons/year	Based on original Chilco permit from IDEQ
	6.85 lbs/day	
PM2.5 :		
Emission Factor:	0.015 lbs/ ton	30% of PM10 for material handling sources
Emissions:	0.38 tons/year	Based on data from EPA's PM Claculator
	2.05 lbs/day	

PLANER CHIP BIN TRUCK LOADOUT

Insignificant based on total emissions.	50,000 Tons of Planer Chips/Year	
PM10 :		
Emission Factor:	0.05 lbs/ton	General Material Handling Factor
Controlled EF:	0.025 lbs/ton	Based on original Chilco permit from IDEQ
Emissions:	1.25 tons/year	Sides of loadout blocked from wind, 50% control.
	6.85 lbs/day	
PM2.5 :		
Emission Factor:	0.015 lbs/ ton	30% of PM10 for material handling sources
Controlled EF:	0.0075 lbs/ton	Based on data from EPA's PM Claculator
Emissions:	0.38 tons/year	Sides of loadout blocked from wind, 50% control.
	2.05 lbs/day	

PLANER SHAVINGS BIN TRUCK LOADOUT

Insignificant based on total emissions.	120,000 Tons of Planer Shavings/Year	
PM10:		
Emission Factor:	0.05 lbs/ton	General Material Handling Factor
Controlled EF:	0.025 lbs/ton	Based on original Chilco permit from IDEQ
Emissions:	1.50 tons/year	Sides of loadout blocked from wind, 50% control.
	8.22 lbs/day	
PM2.5:		
Emission Factor:	0.015 lbs/ton	30% of PM10 for material handling sources
Controlled EF:	0.0075 lbs/ton	Based on data from EPA's PM Claculator
Emissions:	0.45 tons/year	Sides of loadout blocked from wind, 50% control.
	2.47 lbs/day	

PLANER SHAVINGS CYCLONE BAGHOUSE - POINT SOURCE

	29000 scf/min	Baghouse design flow.
	8,760 hr/yr	actual
PM10 :		
Emission Factor:	0.005 gr/dscf	Baghouse design emission rate.
Emissions:	5.44 tpy	
	29.83 lbs/day	
	1.24 lb/hr	
PM2.5 :		
Emission Factor:	0.0015 gr/dscf	30% of PM10 for material handling sources
Emissions:	1.63 tpy	Based on data from EPA's PM Claculator
	8.95 lbs/day	
	0.37 lb/hr	

FUGITIVE DUST - PAVED ROADS

Calculations based on AP-42 Section 13.2.1.3, rev. 1/11

Source	Class	Number Trips Per Year	Distance per Trip (miles)	VMT	Emission Factor lb/VMT	Controlled Emission tpy	Surface Silt Loading sL	Avg. Vehicle Weight W	Weighted Vehicle Weight
Log Trucks	Paved, Loaded	41,786	0.25	10446	2.54	6.64	1.0	40	7.39
	Paved, Empty	41,786	0.25	10446	0.47	1.23	1.0	13	2.40
Chip Trucks	Paved, Loaded	1,751	0.50	875	2.54	0.56	1.0	40	0.62
	Paved, Empty	1,751	0.50	875	0.47	0.10	1.0	13	0.20
Shavings Trucks	Paved, Loaded	5,882	0.50	2941	2.54	1.87	1.0	40	2.08
	Paved, Empty	5,882	0.50	2941	0.47	0.35	1.0	13	0.68
Sawdust Trucks	Paved, Loaded	0	0.50	0	2.54	0.00	1.0	40	0.00
	Paved, Empty	0	0.50	0	0.47	0.00	1.0	13	0.00
Lumber Trucks	Paved, Loaded	18,056	0.50	9028	2.54	5.74	1.0	40	6.38
	Paved, Empty	18,056	0.50	9028	0.47	1.06	1.0	13	2.07
Misc. Vehicles incl employee	Paved	40,000	0.25	10000	0.05	0.13	1.0	3	0.53
		174,949		56,581					22

$E = k(sL)^{0.91}(W)^{1.02} * [1 - 1.2 * P/N]$

	PM	PM10	PM2.5	P=	N=
k =	0.011	0.0022	0.00054	120	365
sL =	1.1	1.1	1.1		
W =	22	22	22		
E =	0.173	0.035	0.008		
% control from washing	50%	50%	50%		

Total PM Emissions:	2.4	tpy
Total PM10 Emissions	0.49	tpy
Total PM2.5 Emission:	0.12	tpy

FIREWATER PUMP

Jockey Pump Controller 3 horsepower
 Main Controller 150 horsepower
 153 horsepower

Pump keeps fire suppression system charged in the event of a power outage. Tested monthly.	500 Hours of Operation	Testing and during power outages
PM/ PM10/PM2.5		
Emission Factor:	2.20E-03 lb/hp-hr	AP-42, Section 3.3, Table 3.3-1
Emissions:	8.42E-02 tons/year 0.34 lb/hr	
Sulfur Dioxide:		
Emission Factor:	2.05E-03 lb/hp-hr	AP-42, Section 3.3, Table 3.3-1
Emissions:	7.84E-02 tons/year 0.31 lb/hr	
Nitrogen Oxides (NOx)		
Emission Factor:	3.10E-02 lb/hp-hr	AP-42, Section 3.3, Table 3.3-1
Emissions:	1.19E+00 tons/year 4.74 lb/hr	
Volatile Organic Compounds (VOC) - Total Organic Compounds		
Emission Factor:	2.51E-03 lb/hp-hr	AP-42, Section 3.3, Table 3.3-1
Emissions:	9.62E-02 tons/year 0.38 lb/hr	
Carbon Monoxide (CO)		
Emission Factor:	6.68E-03 lb/hp-hr	AP-42, Section 3.3, Table 3.3-1
Emissions:	2.56E-01 tons/year 1.02 lb/hr	
Total HAPS		
Emission Factor:	6.45E-03 lb/MMBtu 4.52E-05 lb/hp-hr	AP-42, Section 3.3, Table 3.3-2
Emissions:	1.73E-03 tons/year 6.91E-03 lb/hr	
Lead		
Emission Factor:	4.80E-05 lb/MMBtu 3.36E-07 lb/hp-hr	AP-42, Section 3.3, Table 3.3-2
Emissions:	1.29E-05 tons/year 5.14E-05 lb/hr	

IFG Chilco
Greenhouse Gas Calculations

Hog Fuel Boiler	964,859 MMBtu/year	
Carbon Dioxide (CO ₂) (not actually a greenhouse gas when emitted from biomass burning)		
Emission Factor:	195 lb/mmbtu	(AP-42 TABLE 1.6-3, Rev 09/03)
Emissions:	94,074 tpy CO ₂	
Methane		
Emission Factor:	0.021 lb/mmbtu	(AP-42 TABLE 1.6-3, Rev 09/03)
Emissions:	20,262 lb/yr	
	193.41 metric tons CO ₂ e, GWP = 21	
Nitrous Oxide		
Emission Factor:	0.013 lb/mmbtu	(AP-42 TABLE 1.6-3, Rev 09/03)
Emissions:	12,543 lb/yr	
	1,767.45 metric tons CO ₂ e, GWP = 310	

Natural Gas Combustion	46 MMBtu/hr	Boiler Design
	402,960 MMBtu/year	
Carbon Dioxide (CO ₂)		
Emission Factor:	53.02 kg/mmbtu	EPA Mandatory Reporting Rule
Emissions:	21,365 metric tons CO ₂	
	21,365 metric tons CO ₂ e, GWP = 1	
Methane		
Emission Factor:	0.001 kg/mmbtu	EPA Mandatory Reporting Rule
Emissions:	0.40 metric tons CO ₂	
	8 metric tons CO ₂ e, GWP = 21	
Nitrous Oxide		
Emission Factor:	1.00E-04 kg/mmbtu	EPA Mandatory Reporting Rule
Emissions:	0.04 metric tons CO ₂	
	12 metric tons CO ₂ e, GWP = 310	

Fuel in On-site Vehicles

Gallons gasoline	20,000 Gallons/yr, estimated max
Gallons diesel	400,000 Gallons/yr
Carbon Dioxide (CO ₂) , Gasoline	
Emission Factor:	8.81 kg/gallon Table 5, Climate Leader
Emissions:	176 metric tons CO ₂ e, GWP = 1
Carbon Dioxide (CO ₂) , Diesel	
Emission Factor:	10.15 kg/gallon Table 5, Climate Leader
Emissions:	4,060 metric tons CO ₂ e, GWP = 1
Methane, Gasoline	
Emission Factor:	5.00E-04 kg/gallon Table A-6: Climate Leader
Emissions:	0.21 metric tons CO ₂ e, GWP = 21
Methane, Diesel	
Emission Factor:	5.80E-04 kg/gallon Table A-6: Climate Leader
Emissions:	4.87 metric tons CO ₂ e, GWP = 21
Nitrous Oxide, Gasoline	
Emission Factor:	2.20E-04 kg/gallon Table A-6: Climate Leader
Emissions:	1.36 metric tons CO ₂ e, GWP = 310
Nitrous Oxide, Diesel	
Emission Factor:	2.60E-04 kg/gallon Table A-6: Climate Leader
Emissions:	1.61 metric tons CO ₂ e, GWP = 310

Total GHG Emissions (excluding biogenic CO ₂)	Stationary Only	
Carbon Dioxide	25,601	21,365
Methane	198.90	193.81
Nitrous Oxide	1,770.46	1,767.49
	27,570	23,326
		metric tons CO ₂ e

Title 40: Protection of Environment. Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPS). Subpart DDDDD—National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

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Review of NESHAPS Subpart DDDDD, from [www.ecfr.gov](http://www.ecfr.gov). This source includes links to amendments. Only sections of the regulation that are considered applicable to IFG are included. [Comments related IFG's compliance methodology are in green font and are underlined.](#)  
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§ 63.7485 Am I subject to this subpart? [Section Revised in amendment(s) published January 31, 2013, in 78 FR 7162.] **EFFECTIVE DATES: April 1, 2013.**

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in § 63.7575 that is located at, or is part of, a major source of HAP, except as specified in § 63.7491. For purposes of this subpart, a major source of HAP is as defined in § 63.2, except that for oil and natural gas production facilities, a major source of HAP is as defined in § 63.7575. [IFG operates industrial boilers at the Chilco sawmill and is subject to this subpart \(DDDDD\). The Chilco sawmill is a major source of HAP emissions.](#)
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**§ 63.7490 What is the affected source of this subpart?**

§ 63.7490(a) This subpart applies to new, reconstructed, and existing affected sources as described in paragraphs (a)(1) and (2) of this section. (1) The affected source of this subpart is the collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory as defined in § 63.7575. (2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler or process heater, as defined in § 63.7575, located at a major source.

§ 63.7490(b) A boiler or process heater is new if you commence construction of the boiler or process heater after June 4, 2010, and you meet the applicability criteria at the time you commence construction. [The natural gas \(gas 1\) boiler is a new boiler because it was first brought onto the facility in 2012.](#)

§ 63.7490(c) A boiler or process heater is reconstructed ... [Does not apply.](#)

§ 63.7490(d) A boiler or process heater is existing if it is not new or reconstructed. [The Chilco wood-fired \(hog fuel\) boiler is an affected source and is an existing boiler.](#)

§ 63.7490(e) An existing electric utility steam generating unit (EGU) ... [Does not apply.](#)  
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§ 63.7491 Are any boilers or process heaters not subject to this subpart? [IFG- Chilco does not have any boilers or process heaters that are not subject to this subpart.](#)
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**§ 63.7495 When do I have to comply with this subpart?**

§ 63.7495(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by January 31, 2013, or upon startup of your boiler or process heater, whichever is later. [Paragraph (a) revised in amendment(s) published January 31, 2013, in 78 FR 7162.] [The natural gas boiler is a new source and must comply with applicable work practices, summarized in Table 3, by January 31, 2013. The natural gas boiler is in compliance.](#)

§ 63.7495(b) If you have an existing boiler or process heater, you must comply with this subpart no later than January 31, 2016, except as provided in § 63.6(i). [Paragraph (b) revised in amendment(s) published January 31, 2013, in 78 FR 7162.] [The hog fuel boiler is an existing source and must comply with applicable emission limits, work practices, and operational requirements, summarized in Tables 2, 3 and 4, by January 31, 2016.](#)

§ 63.7495(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP...[Does not apply to IFG-Chilco.](#)

§ 63.7495(d) You must meet the notification requirements in § 63.7545 according to the schedule in § 63.7545 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limits and work practice standards in this subpart. [IFG notification is due by May 31, 2013.](#)

§ 63.7495(e) If you own or operate an industrial, commercial, or institutional boiler or process heater and would be subject to this subpart except for the exemption in § 63.7491(l) for commercial and industrial solid waste incineration units covered by part 60, subpart CCCC or subpart DDDD, ... [Does not apply.](#)

§ 63.7495(f) If you own or operate an existing EGU ... [Does not apply.](#)

§ 63.7495(g) If you own or operate an existing industrial, commercial, or institutional boiler or process heater and would be subject to this subpart except for an exemption in § 63.7491(i) ... [Does not apply.](#)

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§ 63.7499 What are the subcategories of boilers and process heaters?

The subcategories of boilers and process heaters, as defined in § 63.7575 are:

- (a) Pulverized coal/solid fossil fuel units.
- (b) Stokers designed to burn coal/solid fossil fuel.
- (c) Fluidized bed units designed to burn coal/solid fossil fuel.
- (d) Stokers/sloped grate/other units designed to burn kiln dried biomass/bio-based solid.
- (e) Fluidized bed units designed to burn biomass/bio-based solid.
- (f) Suspension burners designed to burn biomass/bio-based solid.
- (g) Fuel cells designed to burn biomass/bio-based solid.
- (h) Hybrid suspension/grate burners designed to burn wet biomass/bio-based solid.
- (i) Stokers/sloped grate/other units designed to burn wet biomass/bio-based solid. [The IFG-Chilco hog fuel boiler falls into this subcategory.](#)
- (j) Dutch ovens/pile burners designed to burn biomass/bio-based solid.
- (k) Units designed to burn liquid fuel that are non-continental units.
- (l) Units designed to burn gas 1 fuels. [The IFG-Chilco hog fuel boiler falls into this subcategory.](#)
- (m) Units designed to burn gas 2 (other) gases.
- (n) Metal process furnaces.
- (o) Limited-use boilers and process heaters.
- (p) Units designed to burn solid fuel.
- (q) Units designed to burn liquid fuel.
- (r) Units designed to burn coal/solid fossil fuel.
- (s) Fluidized bed units with an integrated fluidized bed heat exchanger designed to burn coal/solid fossil fuel.
- (t) Units designed to burn heavy liquid fuel.
- (u) Units designed to burn light liquid fuel.

[Paragraphs d,f,g,h,l,j,k, l revised and paragraphs p,q,r,s,t, u added in amendment(s) published January 31, 2013, in 78 FR 7162.]
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**§ 63.7500 What emission limitations, work practice standards, and operating limits must I meet?**  
Tables are listed at the end of this analysis.

§ 63.7500(a) You must meet the requirements in paragraphs (a)(1) through (3) of this section, except as provided in paragraphs (b), through (e) of this section. You must meet these requirements at all times the affected unit is operating, except as provided in paragraph (f) of this section. IFG will meet the requirements.

§ 63.7500(a)(1) You must meet each emission limit and work practice standard in Tables 1 through 3, and 11 through 13 to this subpart that applies to your boiler or process heater, for each boiler or process heater at your source, except as provided under § 63.7522. The output-based emission limits, in units of pounds per million Btu of steam output, in Tables 1 or 2 to this subpart are an alternative applicable only to boilers and process heaters that generate steam. The output-based emission limits, in units of pounds per megawatt-hour, in Tables 1 or 2 to this subpart are an alternative applicable only to boilers that generate electricity. If you operate a new boiler or process heater, you can choose to comply with alternative limits as discussed in paragraphs (a)(1)(i) through (a)(1)(iii) of this section, but on or after January 31, 2016, you must comply with the emission limits in Table 1 to this subpart.

Table 1 contains no emission limits for new boilers burning gas 1 fuel, so there are no emission limits that apply to the natural gas boiler.

Table 2 contains the applicable emission limits for existing boilers that to the hog fuel boiler. The HCl and mercury limits are new. The MACT CO limit is higher than the current permit limit. The MACT PM limit is lower than the current permit limit, but only includes filterable PM.

Table 3 contains applicable work practice standards for the hog fuel boiler and the natural gas boiler. The hog fuel boiler will have to have annual tune-ups and a one-time energy assessment. If the natural gas boiler is retained, it will also have to have annual tune-ups and a one-time energy assessment.

The startup and shutdown requirements in Item 5 of Table 3 are not compatible with the hog fuel boiler lighting procedures because they don't allow wood to be used during startup. If EPA doesn't correct this requirement, IFG will need to apply for an alternative work practice.

§ 63.7500(a)(2) You must meet each operating limit in Table 4 to this subpart that applies to your boiler or process heater. If you use a control device or combination of control devices not covered in Table 4 to this subpart, or you wish to establish and monitor an alternative operating limit or an alternative monitoring parameter, you must apply to the EPA Administrator for approval of alternative monitoring under § 63.8(f).

Table 4 contains operating limits for the hog fuel boiler. MACT limits the opacity to 10% (daily block average), while the permit allows 20% over a 3-minute average. MACT requires that the boiler can only be operated at 110% of the source test level, while the permit allows 120%.

§ 63.7500(a)(3) At all times, you must operate and maintain any affected source (as defined in § 63.7490), 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 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. IFG currently meets this requirement and will continue to comply.

§ 63.7500(b) As provided in § 63.6(g), EPA may approve use of an alternative to the work practice standards in this section. IFG may need to request EPA approval for an alternative to the startup work practice standards contained in Table 3, Section 5.

§ 63.7500(c) Limited-use boilers and process heaters must complete a tune-up every 5 years as specified in § 63.7540. They are not subject to the emission limits in Tables 1 and 2 or 11 through 13 to this subpart, the annual tune-up, or the energy assessment requirements in Table 3 to this subpart, or the operating limits in Table 4 to this subpart. [Paragraph (c) revised in amendment(s) published January 31, 2013, in 78 FR 7162.] [IFG Analysis: IFG may choose to re-define the natural gas boiler as a limited use boiler, depending on the restrictions that would impose.](#)

§ 63.7500(d) Boilers and process heaters with a heat input capacity of less than or equal to 5 million Btu per hour in the units designed to burn gas 2 (other) fuels subcategory or units designed to burn light liquid fuels subcategory must complete a tune-up every 5 years as specified in § 63.7540. [Paragraph (d) added in amendment(s) published January 31, 2013, in 78 FR 7162.] [... Does not apply.](#)

§ 63.7500(e) Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in § 63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity greater than 5 million Btu per hour and less than 10 million Btu per hour must complete a tune-up every 2 years as specified in § 63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 to this subpart, or the operating limits in Table 4 to this subpart. [Paragraph (d) added in amendment(s) published January 31, 2013, in 78 FR 7162.] [The IFG natural gas boiler is larger than 10 million Btu/hr and does not have an oxygen trim system. An annual tune-up is required.](#)

§ 63.7500(f) These standards apply at all times the affected unit is operating, except during periods of startup and shutdown during which time you must comply only with Table 3 to this subpart. [Paragraph (f) added in amendment(s) published January 31, 2013, in 78 FR 7162.] [The opacity and emission limits on the hog fuel boiler do not apply during startup and shutdown. The opacity limits contained in the air quality permit continue to apply during startup and shutdown.](#)

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**§ 63.7501 How can I assert an affirmative defense if I exceed an emission limitations during a malfunction?** [Section revised in amendment(s) published January 31, 2013, in 78 FR 7162.]

[IFG is aware of this section and will follow the requirements should it become necessary.](#)

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**§ 63.7505 What are my general requirements for complying with this subpart?**

§ 63.7505(a) You must be in compliance with the emission limits, work practice standards, and operating limits in this subpart. These limits apply to you at all times the affected unit is operating except for the periods noted in § 63.7500(f). [Paragraph (a) revised in amendment(s) published January 31, 2013, in 78 FR 7162.] [IFG will comply with all the emission limits, work practice standards and operating limits in this subpart, as summarized in Tables 2, 3 and 4.](#)

§ 63.7505(b) [Reserved]

§ 63.7505(c) You must demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or continuous monitoring systems (CMS), including a continuous emission monitoring system (CEMS), continuous opacity monitoring system (COMS), continuous parameter monitoring system (CPMS), or particulate matter continuous parameter monitoring system (PM CPMS), where applicable. You may demonstrate compliance with the applicable emission limit for hydrogen chloride (HCl), mercury, or total selected metals (TSM) using fuel analysis if the emission rate calculated according to § 63.7530(c) is less than the applicable emission limit. (For gaseous fuels, you may not use fuel analyses to comply with the TSM alternative standard or the HCl standard.) Otherwise, you must demonstrate compliance for HCl, mercury, or TSM using performance testing, if subject to an applicable emission limit listed in Tables 1, 2, or 11 through 13 to this subpart. [Paragraph (c) revised in

amendment(s) published January 31, 2013, in 78 FR 7162.] [IFG will use source testing and fuel analysis as appropriate to demonstrate compliance.](#)

§ 63.7505(d) If you demonstrate compliance with any applicable emission limit through performance testing and subsequent compliance with operating limits (including the use of CPMS)..., [IFG is not required to use continuous monitoring to demonstrate compliance with this regulation.](#)

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**§ 63.7510 What are my initial compliance requirements and by what date must I conduct them?**  
[Section revised in amendment(s) published January 31, 2013, in 78 FR 7162.]

§ 63.7510(a) For each boiler or process heater that is required or that you elect to demonstrate compliance with any of the applicable emission limits in Tables 1 or 2 or 11 through 13 of this subpart through performance testing, your initial compliance requirements include all the following:

§ 63.7510(a)(1) Conduct performance tests according to § 63.7520 and Table 5 to this subpart. [IFG will comply.](#)

§ 63.7510(a)(2) Conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to § 63.7521 and Table 6 to this subpart, except as specified in paragraphs (a)(2)(i) through (iii) of this section. [IFG will comply.](#)

§ 63.7510(a)(2)(i) For each boiler or process heater that burns a single type of fuel, you are not required to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to § 63.7521 and Table 6 to this subpart. For purposes of this subpart, units that use a supplemental fuel only for startup, unit shutdown, and transient flame stability purposes still qualify as units that burn a single type of fuel, and the supplemental fuel is not subject to the fuel analysis requirements under § 63.7521 and Table 6 to this subpart. [Noted.](#)

§ 63.7510(a)(2)(ii) When natural gas, refinery gas, or other gas 1 fuels are co-fired with other fuels. [Does not Apply](#)

§ 63.7510(a)(2)(iii) You are not required to conduct a chlorine fuel analysis for any gaseous fuels. You must conduct a fuel analysis for mercury on gaseous fuels unless the fuel is exempted in paragraphs (a)(2)(i) and (ii) of this section. [Noted.](#)

§ 63.7510(a)(3) Establish operating limits according to § 63.7530 and Table 7 to this subpart. [IFG will establish steam production operating limits based on the steaming rate during the PM MACT compliance test. IFG will establish a minimum oxygen operating limit based on the oxygen levels during the CO compliance test. If IFG installs converts the oxygen analyzer to an oxygen trim system, the trim system will be set to the required oxygen level. If IFG retains the oxygen analyzer only, IFG will track rolling 30-day oxygen averages to determine compliance, as described in Table 8.](#)

§ 63.7510(a)(4) Conduct CMS performance evaluations according to § 63.7525. [IFG will need to install a CMS for opacity \(COMS\) on the hog fuel boiler and will conduct the performance evaluations as required.](#)

§ 63.7510(b) For each boiler or process heater that you elect to demonstrate compliance with the applicable emission limits in Tables 1 or 2 or 11 through 13 to this subpart for HCl, mercury, or TSM through fuel analysis, your initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to § 63.7521 and Table 6 to this subpart and establish operating limits according to § 63.7530 and Table 8 to this subpart. The fuels described in paragraph (a)(2)(i) and (ii) of this section are exempt from these fuel analysis and operating limit requirements. The fuels described in paragraph (a)(2)(ii) of this section are exempt from the chloride fuel analysis and operating limit requirements. ... [IFG will use either fuel testing or source testing for HCl and mercury compliance. PM testing will be used as allowed for TSM compliance demonstration.](#)

§ 63.7510(c) If your boiler or process heater is subject to a carbon monoxide (CO) limit, your initial compliance demonstration for CO is to conduct a performance test for CO according to Table 5 to this subpart or conduct a performance evaluation of your continuous CO monitor, if applicable, according to § 63.7525(a). Boilers and process heaters that use a CO CEMS to comply with the applicable alternative CO CEMS emission standard listed in Tables 12, or 11 through 13 to this subpart, as specified in § 63.7525(a), are exempt from the initial CO performance testing and oxygen concentration operating limit requirements specified in paragraph (a) of this section. [IFG will source test the hog fuel boiler for CO.](#)

§ 63.7510(d) If your boiler or process heater is subject to a PM limit, your initial compliance demonstration for PM is to conduct a performance test in accordance with § 63.7520 and Table 5 to this subpart. [IFG will source test the hog-fuel boiler for PM.](#)

§ 63.7510(e) For existing affected sources (as defined in § 63.7490), you must complete the initial compliance demonstration, as specified in paragraphs (a) through (d) of this section, no later than 180 days after the compliance date that is specified for your source in § 63.7495 and according to the applicable provisions in § 63.7(a)(2) as cited in Table 10 to this subpart, except as specified in paragraph (j) of this section. You must complete an initial tune-up by following the procedures described in § 63.7540(a)(10)(i) through (vi) no later than the compliance date specified in § 63.7495, except as specified in paragraph (j) of this section. You must complete the one-time energy assessment specified in Table 3 to this subpart no later than the compliance date specified in § 63.7495, except as specified in paragraph (j) of this section. [The hog-fuel boiler source tests are due by July 29, 2016.](#)

§ 63.7510(f) For new or reconstructed affected sources (as defined in § 63.7490), you must complete the initial compliance demonstration with the emission limits no later than July 30, 2013 or within 180 days after startup of the source, whichever is later. If you are demonstrating compliance with an emission limit in Tables 11 through 13 to this subpart that is less stringent (that is, higher) than the applicable emission limit in Table 1 to this subpart, you must demonstrate compliance with the applicable emission limit in Table 1 no later than July 29, 2016. [The natural gas boiler is a new boiler, but is not subject to any emission limits.](#)

§ 63.7510(g) For new or reconstructed affected sources (as defined in § 63.7490), you must demonstrate initial compliance with the applicable work practice standards in Table 3 to this subpart within the applicable annual, biennial, or 5-year schedule as specified in § 63.7540(a) following the initial compliance date specified in § 63.7495(a). Thereafter, you are required to complete the applicable annual, biennial, or 5-year tune-up as specified in § 63.7540(a). [The first tune-up for the natural gas boiler is due by January 31, 2014.](#)

§ 63.7510(h) For affected sources (as defined in § 63.7490) that ceased burning solid waste consistent with § 63.7495(e) ... [Does not apply.](#)

§ 63.7510(i) For an existing EGU that becomes subject after January 31, 2013... [Does not apply.](#)

§ 63.7510(j) For existing affected sources (as defined in § 63.7490) that have not operated between the effective date of the rule and the compliance date that is specified for your source in § 63.7495, you must complete the initial compliance demonstration, if subject to the emission limits in Table 2 to this subpart, as specified in paragraphs (a) through (d) of this section, no later than 180 days after the re-start of the affected source and according to the applicable provisions in § 63.7(a)(2) as cited in Table 10 to this subpart. You must complete an initial tune-up by following the procedures described in § 63.7540(a)(10)(i) through (vi) no later than 30 days after the re-start of the affected source and, if applicable, complete the one-time energy assessment specified in Table 3 to this subpart, no later than the compliance date specified in § 63.7495. [Noted.](#)

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**§ 63.7515 When must I conduct subsequent performance tests, fuel analyses, or tune-ups?**

[Section revised in amendment(s) published January 31, 2013, in 78 FR 7162.]

§ 63.7515(a) You must conduct all applicable performance tests according to § 63.7520 on an annual basis, except as specified in paragraphs (b) through (e), (g), and (h) of this section. Annual performance tests must be completed no more than 13 months after the previous performance test, except as specified in paragraphs (b) through (e), (g), and (h) of this section. [IFG will schedule source tests as required.](#)

§ 63.7515(b) If your performance tests for a given pollutant for at least 2 consecutive years show that your emissions are at or below 75 percent of the emission limit (or, in limited instances as specified in Tables 1 and 2 or 11 through 13 to this subpart, at or below the emission limit) for the pollutant, and if there are no changes in the operation of the individual boiler or process heater or air pollution control equipment that could increase emissions, you may choose to conduct performance tests for the pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test. [This provision is similar to the current permit. IFG will schedule source tests as required/allowed under the rule.](#)

If you elect to demonstrate compliance using emission averaging under § 63.7522, you must continue to conduct performance tests annually. [IFG has no current plans to use emission averaging.](#)

The requirement to test at maximum chloride input level is waived unless the stack test is conducted for HCl. The requirement to test at maximum mercury input level is waived unless the stack test is conducted for mercury. The requirement to test at maximum TSM input level is waived unless the stack test is conducted for TSM. [IFG may source test for HCl and TSM \(PM as a surrogate\). IFG will comply with the maximum chloride and maximum TSM input requirements as necessary.](#)

§ 63.7515(c) If a performance test shows emissions exceeded the emission limit or 75 percent of the emission limit (as specified in Tables 1 and 2 or 11 through 13 to this subpart) for a pollutant, you must conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period meet the required level (at or below 75 percent of the emission limit, as specified in Tables 1 and 2 or 11 through 13 to this subpart). [This provision is similar to the current permit. IFG will schedule source tests as required under the rule.](#)

§ 63.7515(d) If you are required to meet an applicable tune-up work practice standard, you must conduct an annual, biennial, or 5-year performance tune-up according to § 63.7540(a)(10), (11), or (12), respectively. Each annual tune-up specified in § 63.7540(a)(10) must be no more than 13 months after the previous tune-up. Each biennial tune-up specified in § 63.7540(a)(11) must be conducted no more than 25 months after the previous tune-up. Each 5-year tune-up specified in § 63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed affected source (as defined in § 63.7490), the first annual, biennial, or 5-year tune-up must be no later than 13 months, 25 months, or 61 months, respectively, after the initial startup of the new or reconstructed affected source. [IFG will schedule boiler tune-ups as required under the rule.](#)

§ 63.7515(e) If you demonstrate compliance with the mercury, HCl, or TSM based on fuel analysis, you must conduct a monthly fuel analysis according to § 63.7521 for each type of fuel burned that is subject to an emission limit in Tables 1, 2, or 11 through 13 to this subpart. You may comply with this monthly requirement by completing the fuel analysis any time within the calendar month as long as the analysis is separated from the previous analysis by at least 14 calendar days. If you burn a new type of fuel, you must conduct a fuel analysis before burning the new type of fuel in your boiler or process heater. You must still meet all applicable continuous compliance requirements in § 63.7540. If each of 12 consecutive monthly fuel analyses demonstrates 75 percent or less of the compliance level, you may decrease the fuel analysis frequency to quarterly for that fuel. If any quarterly sample exceeds 75 percent of the compliance level or you begin burning a new type of fuel, you must return to monthly monitoring for that fuel, until 12 months of fuel analyses are again less than 75 percent of the compliance level. [If IFG chooses to use fuel analysis, the sampling program will comply with the schedule in Paragraph \(e\).](#)

§ 63.7515(f) You must report the results of performance tests and the associated fuel analyses within 60 days after the completion of the performance tests. This report must also verify that the operating limits for each boiler or process heater have not changed or provide documentation of revised operating limits established according to § 63.7530 and Table 7 to this subpart, as applicable. The reports for all subsequent performance tests must include all applicable information required in § 63.7550. IFG will report results of performance tests and fuel analyses in the specified time frame. Boiler operating levels during the source tests will be documented.

§ 63.7515(g) For affected sources (as defined in § 63.7490) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, you must complete the subsequent compliance demonstration, if subject to the emission limits in Tables 1, 2, or 11 through 13 to this subpart, no later than 180 days after the re-start of the affected source and according to the applicable provisions in § 63.7(a)(2) as cited in Table 10 to this subpart. You must complete a subsequent tune-up by following the procedures described in § 63.7540(a)(10)(i) through (vi) and the schedule described in § 63.7540(a)(13) for units that are not operating at the time of their scheduled tune-up. Noted.

§ 63.7515(h) If your affected boiler or process heater is in the unit designed to burn light liquid subcategory ... Does not apply.

§ 63.7515(i) If you operate a CO CEMS that meets the Performance Specifications outlined in § 63.7525(a)(3) of this subpart to demonstrate compliance with the applicable alternative CO CEMS emission standard listed in Tables 1, 2, or 11 through 13 to this subpart, you are not required to conduct CO performance tests and are not subject to the oxygen concentration operating limit requirement specified in § 63.7510(a). IFG does not plan to use a CO CEMS.

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**§ 63.7520 What stack tests and procedures must I use? [Section revised in amendment(s) published January 31, 2013, in 78 FR 7162.]**

§ 63.7520(a) You must conduct all performance tests according to § 63.7(c), (d), (f), and (h). You must also develop a site-specific stack test plan according to the requirements in § 63.7(c). You shall conduct all performance tests under such conditions as the Administrator specifies to you based on the representative performance of each boiler or process heater for the period being tested. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Source test protocols will be submitted as required and equipment will be operated during testing as required by the EPA reference methods.

§ 63.7520(b) You must conduct each performance test according to the requirements in Table 5 to this subpart. Source tests will be performed following the appropriate EPA reference methods.

§ 63.7520(c) You must conduct each performance test under the specific conditions listed in Tables 5 and 7 to this subpart. You must conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury, and TSM if you are opting to comply with the TSM alternative standard and you must demonstrate initial compliance and establish your operating limits based on these performance tests. These requirements could result in the need to conduct more than one performance test. Following each performance test and until the next performance test, you must comply with the operating limit for operating load conditions specified in Table 4 to this subpart. This may not apply because the hog fuel boiler is a single fuel boiler. Chlorine and mercury concentrations in the hog fuel are only trace amounts and vary naturally.

§ 63.7520(d) You must conduct a minimum of three separate test runs for each performance test required in this section, as specified in § 63.7(e)(3). Each test run must comply with the minimum applicable sampling times or volumes specified in Tables 1 and 2 or 11 through 13 to this subpart. Each test will comply with the reference method requirements.

§ 63.7520(e) To determine compliance with the emission limits, you must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 at 40 CFR part 60, appendix A-7 of this chapter to convert the measured particulate matter (PM) concentrations, the measured HCl concentrations, the measured mercury concentrations, and the measured TSM concentrations that result from the performance test to pounds per million Btu heat input emission rates. [Source test results will be converted to heat-input basis using the F-Factors if required. IFG will use test results based on steam output data whenever possible.](#)

§ 63.7520(f) Except for a 30-day rolling average based on CEMS (or sorbent trap monitoring system) data, if measurement results for any pollutant are reported as below the method detection level (e.g., laboratory analytical results for one or more sample components are below the method defined analytical detection level), you must use the method detection level as the measured emissions level for that pollutant in calculating compliance. The measured result for a multiple component analysis (e.g., analytical values for multiple Method 29 fractions both for individual HAP metals and for total HAP metals) may include a combination of method detection level data and analytical data reported above the method detection level. [If measured emissions are below the detection limit, the detection limit will be used as the measured emission level.](#)

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**§ 63.7521 What fuel analyses, fuel specification, and procedures must I use?**

§ 63.7521(a) For solid and liquid fuels, you must conduct fuel analyses for chloride and mercury according to the procedures in paragraphs (b) through (e) of this section and Table 6 to this subpart, as applicable. For solid fuels and liquid fuels, you must also conduct fuel analyses for TSM if you are opting to comply with the TSM alternative standard. [This section applies to hog fuel \(wood, biomass\).](#)

For gas 2 (other) fuels.. [Does not Apply.](#)

You are required to conduct fuel analyses only for fuels and units that are subject to emission limits for mercury, HCl, or TSM in Tables 1 and 2 or 11 through 13 to this subpart. Gaseous and liquid fuels are exempt from the sampling requirements in paragraphs (c) and (d) of this section and Table 6 to this subpart. [This section applies to hog fuel only, not to natural gas \(gas 1\).](#)

§ 63.7521(b) *et seq.* You must develop a site-specific fuel monitoring plan according to the following procedures and requirements in paragraphs (b)(1) and (2) of this section, if you are required to conduct fuel analyses as specified in § 63.7510. [IFG will provide the site-specific fuel monitoring plan as required.](#)

§ 63.7521(c) *et seq.* At a minimum, you must obtain three composite fuel samples for each fuel type according to the procedures in paragraph (c)(1) or (2) of this section, or the methods listed in Table 6 to this subpart, or use an automated sampling mechanism that provides representative composite fuel samples for each fuel type that includes both coarse and fine material. [IFG will collect fuel samples as required. Details will be provided in the fuel monitoring plan.](#)

§ 63.7521(d) *et seq.* You must prepare each composite sample according to the procedures in paragraphs (d)(1) through (7) of this section. [IFG will prepare fuel samples as required. Details will be provided in the fuel monitoring plan.](#)

§ 63.7521(e) You must determine the concentration of pollutants in the fuel (mercury and/or chlorine and/or TSM) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 to this subpart, for use in Equations 7, 8, and 9 of this subpart. [IFG will follow the specified procedures and use the required calculations.](#)

§ 63.7521(f) To demonstrate that a gaseous fuel other than natural gas ... [Does not apply.](#)

§ 63.7521(g) You must develop and submit a site-specific fuel analysis plan for other gas 1 fuels ... [Does not apply.](#)

§ 63.7521(h) You must obtain a single fuel sample for each fuel type according to the sampling procedures listed in Table 6 for fuel specification of gaseous fuels. [Does not apply.](#)

§ 63.7521(i) You must determine the concentration in the fuel of mercury, in units of microgram per cubic meter, dry basis, of each sample for each other gas 1 fuel type ... [Does not apply.](#)

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**§ 63.7522 Can I use emissions averaging to comply with this subpart?**

(a) As an alternative to meeting the requirements of § 63.7500 for PM (or TSM), HCl, or mercury on a boiler or process heater-specific basis, if you have more than one existing boiler or process heater in any subcategories located at your facility, you may demonstrate compliance by emissions averaging, if your averaged emissions are not more than 90 percent of the applicable emission limit, according to the procedures in this section. You may not include new boilers or process heaters in an emissions average. [IFG-Chilco does not have more than one existing boiler in any subcategory. This section does not apply.](#)

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**§ 63.7525 What are my monitoring, installation, operation, and maintenance requirements?**

[Section revised in amendment(s) published January 31, 2013, in 78 FR 7162.]

§ 63.7525(a) If your boiler or process heater is subject to a CO emission limit in Tables 1, 2, or 11 through 13 to this subpart, you must install, operate, and maintain an oxygen analyzer system, as defined in § 63.7575, or install, certify, operate and maintain continuous emission monitoring systems for CO and oxygen according to the procedures in paragraphs (a)(1) through (7) of this section.

§ 63.7525(a)(1) Install the CO CEMS and oxygen analyzer by the compliance date specified in § 63.7495. [IFG has an oxygen analyzer system in place and does not intend to install a CO CEMS.](#)

§ 63.7525(a)(2) To demonstrate compliance with the applicable alternative CO CEMS emission ... [Does not apply. IFG does not plan to install a CO CEMS.](#)

§ 63.7525(a)(3) – (6) ... Do not apply because IFG does not plan to use a CO CEMS.

§ 63.7525(a)(7) Operate an oxygen trim system with the oxygen level set no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test as the operating limit for oxygen according to Table 7 to this subpart. [The oxygen level measured during the CO MACT compliance test becomes the lower set point for the oxygen trim system. IFG may install an oxygen trim system on the Chilco boiler.](#)

§ 63.7525(b) If your boiler or process heater is in the unit designed to burn coal/solid fossil fuel subcategory or the unit designed to burn heavy liquid subcategory ... [Does not apply.](#)

§ 63.7525(c) If you have an applicable opacity operating limit in this rule, and are not otherwise required or elect to install and operate a PM CPMS, PM CEMS, or a bag leak detection system, you must install, operate, certify and maintain each COMS according to the procedures in paragraphs (c)(1) through (7) of this section by the compliance date specified in § 63.7495. [IFG is required to install and operate a COMS on the EFB stack. IFG will install the COMS as required before the January 31, 2016 compliance date.](#)

§ 63.7525(c)(1) Each COMS must be installed, operated, and maintained according to Performance Specification 1 at appendix B to part 60 of this chapter. [The COMS installation will conform to PS1.](#)

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§ 63.7525(c)(2) You must conduct a performance evaluation of each COMS according to the requirements in § 63.8(e) and according to Performance Specification 1 at appendix B to part 60 of this chapter. [The COMS calibration and certification will conform to PS1.](#)

§ 63.7525(c)(3) As specified in § 63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. [The COMS will sample and analyze as required.](#)

§ 63.7525(c)(4) The COMS data must be reduced as specified in § 63.8(g)(2). [The COMS will sample and analyze as required.](#)

§ 63.7525(c)(5) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in § 63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS. [The COMS monitoring plan will include the calibration and audit requirements.](#)

§ 63.7525(c)(6) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of § 63.8(e). You must identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit. Any 6-minute period for which the monitoring system is out of control and data are not available for a required calculation constitutes a deviation from the monitoring requirements. [The COMS will be operated and maintained according to the monitoring plan.](#)

§ 63.7525(c)(7) You must determine and record all the 6-minute averages (and daily block averages as applicable) collected for periods during which the COMS is not out of control. [The COMS will be programmed to provide the appropriate averages.](#)

§ 63.7525(d) If you have an operating limit that requires the use of a CMS other than a PM CPMS or COMS, you must install, operate, and maintain each CMS according to the procedures in paragraphs (d)(1) through (5) of this section by the compliance date specified in § 63.7495. [Does not apply.](#)

§ 63.7525(e) If you have an operating limit that requires the use of a flow monitoring system, you must meet the requirements in paragraphs (d) and (e)(1) through (4) of this section.... [Does this apply to the steam flow monitor?.](#)

§ 63.7525(f) If you have an operating limit that requires the use of a pressure monitoring system, you must meet the requirements in paragraphs (d) and (f)(1) through (6) of this section. .... [Does not apply](#)

§ 63.7525(g) If you have an operating limit that requires a pH monitoring system.... [Does not apply](#)

§ 63.7525(h) If you have an operating limit that requires a secondary electric power monitoring system for an electrostatic precipitator (ESP) operated with a wet scrubber, you must meet the requirements in paragraphs (h)(1) and (2) of this section. .... [Does not apply.](#)

§ 63.7525(i) If you have an operating limit that requires the use of a monitoring system to measure sorbent injection rate .... [Does not apply](#)

§ 63.7525(j) If you are not required to use a PM CPMS and elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart .... [Does not apply](#)

§ 63.7525(k) For each unit that meets the definition of limited-use boiler or process heater, you must keep fuel use records for the days the boiler or process heater was operating. [IFG will follow the requirements if they install or convert a boiler to limited use.](#)

§ 63.7525(l) For each unit for which you decide to demonstrate compliance with the mercury or HCl emissions limits in Tables 1 or 2 or 11 through 13 of this subpart by use of a CEMS for mercury or HCl.... [Does not apply](#)

§ 63.7525(m) If your unit is subject to a HCl emission limit in Tables 1, 2, or 11 through 13 of this subpart and you have an acid gas wet scrubber or dry sorbent injection control technology and you use an SO<sub>2</sub> CEMS, .... [Does not apply](#)

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**§ 63.7530 How do I demonstrate initial compliance with the emission limitations, fuel specifications and work practice standards?** [Section revised in amendment(s) published January 31, 2013, in 78 FR 7162.]

§ 63.7530(a) You must demonstrate initial compliance with each emission limit that applies to you by conducting initial performance tests and fuel analyses and establishing operating limits, as applicable, according to § 63.7520, paragraphs (b) and (c) of this section, and Tables 5 and 7 to this subpart. The requirement to conduct a fuel analysis is not applicable for units that burn a single type of fuel, as specified by § 63.7510(a)(2)(i). If applicable, you must also install, operate, and maintain all applicable CMS (including CEMS, COMS, and CPMS) according to § 63.7525. [IFG will demonstrate initial compliance by source testing or fuel analyses.](#)

§ 63.7530(b) If you demonstrate compliance through performance testing, you must establish each site-specific operating limit in Table 4 to this subpart that applies to you according to the requirements in § 63.7520, Table 7 to this subpart, and paragraph (b)(4) of this section, as applicable. You must also conduct fuel analyses according to § 63.7521 and establish maximum fuel pollutant input levels according to paragraphs (b)(1) through (3) of this section, as applicable, and as specified in § 63.7510(a)(2). (Note that § 63.7510(a)(2) exempts certain fuels from the fuel analysis requirements.) However, if you switch fuel(s) and cannot show that the new fuel(s) does (do) not increase the chlorine, mercury, or TSM input into the unit through the results of fuel analysis, then you must repeat the performance test to demonstrate compliance while burning the new fuel(s). [IFG will establish site-specific operating limits based on performance testing as required. The boiler must be operated within 90% to 110% of the allowable steaming rate during the source test. IFG will follow all the applicable procedures listed in Paragraph \(b\).](#)

§ 63.7530(c) If you elect to demonstrate compliance with an applicable emission limit through fuel analysis, you must conduct fuel analyses according to § 63.7521 and follow the procedures in paragraphs (c)(1) through (5) of this section. [If demonstrating compliance through fuel analysis, IFG will follow all the applicable procedures listed in Paragraph \(c\).](#)

§ 63.7530(d) If you own or operate an existing unit with a heat input capacity of less than 10 million Btu per hour or a unit in the unit designed to burn gas 1 subcategory. ... [Does not apply. The natural gas boiler is a new unit designed to burn gas 1.](#)

§ 63.7530(e) You must include with the Notification of Compliance Status a signed certification that the energy assessment was completed according to Table 3 to this subpart and is an accurate depiction of your facility at the time of the assessment. [IFG will provide appropriate notification for the energy assessment.](#)

§ 63.7530(f) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.7545(e). [IFG will provide all required notifications.](#)

§ 63.7530(g) If you elect to demonstrate that a gaseous fuel meets the specifications of another gas 1 fuel as defined in § 63.7575... [Does not apply.](#)

§ 63.7530(h) If you own or operate a unit subject to emission limits in Tables 1 or 2 or 11 through 13 to this subpart, you must meet the work practice standard according to Table 3 of this subpart. During startup and shutdown, you must only follow the work practice standards according to item 5 of Table 3 of this subpart. [The work practices standards in Item 5 of Table 3 are not compatible with hog-fuel boiler operation. IFG may need to apply to EPA for an alternative startup procedure that allows the use of wood.](#)

§ 63.7530(i) If you opt to comply with the alternative SO<sub>2</sub> CEMS operating limit ... [Does not apply.](#)

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§ 63.7533 Can I use efficiency credits earned from implementation of energy conservation measures to comply with this subpart? [Section revised in amendment(s) published January 31, 2013, in 78 FR 7162.]
[IFG may choose to use efficiency credits at Chilco, and will follow all the requirements of this section.](#)

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**§ 63.7535 How do I monitor and collect data to demonstrate continuous compliance?** [Section revised in amendment(s) published January 31, 2013, in 78 FR 7162.]

§ 63.7535(a) You must monitor and collect data according to this section and the site-specific monitoring plan required by § 63.7505(d). [IFG will comply with this section of the regulation and the site-specific monitoring plan when collecting data from the COMS.](#)

§ 63.7535(b) You must operate the monitoring system and collect data at all required intervals at all times that each boiler or process heater is operating and compliance is required, except for periods of monitoring system malfunctions or out of control periods (see § 63.8(c)(7) of this part), and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in your site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable. [Noted.](#)

§ 63.7535(c) You may not use data recorded during monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels. You must record and make available upon request results of CMS performance audits and dates and duration of periods when the CMS is out of control to completion of the corrective actions necessary to return the CMS to operation consistent with your site-specific monitoring plan. You must use all the data collected during all other periods in assessing compliance and the operation of the control device and associated control system. [Noted.](#)

§ 63.7535(d) Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. In calculating monitoring results, do not use any data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities. You must calculate monitoring results using all other monitoring data collected while the process is operating. You must report all periods when the monitoring system is out of control in your annual report. [Noted.](#)

**§ 63.7540 How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?** [Section revised in amendment(s) published January 31, 2013, in 78 FR 7162.]

§ 63.7540(a) You must demonstrate continuous compliance with each emission limit in Tables 1 and 2 or 11 through 13 to this subpart, the work practice standards in Table 3 to this subpart, and the operating limits in Table 4 to this subpart that applies to you according to the methods specified in Table 8 to this subpart and paragraphs (a)(1) through (19) of this section. [Applicable portions of the tables are included at the end of this analysis.](#)

§ 63.7540(a)(1) Following the date on which the initial compliance demonstration is completed or is required to be completed under §§ 63.7 and 63.7510, whichever date comes first, operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 of this subpart except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits must be confirmed or reestablished during performance tests. [The allowable steaming rate for the hog fuel boiler will be 110% of the steaming rate during initial MACT compliance test. The initial MACT compliance test isn't due until July 2016 \(180 days after January 31, 2016\). IFG is required to test the Chilco boiler before July 2013, to demonstrate compliance with the Idaho air quality permit.](#)

§ 63.7540(a)(2) As specified in § 63.7550(c), you must keep records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would result in either of the following: (i) Lower emissions of HCl, mercury, and TSM than the applicable emission limit for each pollutant, if you demonstrate compliance through fuel analysis. (ii) Lower fuel input of chlorine, mercury, and TSM than the maximum values calculated during the last performance test, if you demonstrate compliance through performance testing. [IFG will keep appropriate records.](#)

§ 63.7540(a)(3) If you demonstrate compliance with an applicable HCl emission limit through fuel analysis for a solid or liquid fuel and you plan to burn a new type of solid or liquid fuel, you must recalculate the HCl emission rate using Equation 12 of § 63.7530 according to paragraphs (a)(3)(i) through (iii) of this section. You are not required to conduct fuel analyses for the fuels described in § 63.7510(a)(2)(i) through (iii). You may exclude the fuels described in § 63.7510(a)(2)(i) through (iii) when recalculating the HCl emission rate. [IFG may demonstrate HCl compliance through fuel analysis. The Chilco boiler only burns wood and bark, and IFG does not foresee ever using a different fuel type.](#)

§ 63.7540(a)(4) *et seq.* If you demonstrate compliance with an applicable HCl emission limit through performance testing and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum chlorine input using Equation 7 of § 63.7530. If the results of recalculating the maximum chlorine input using Equation 7 of § 63.7530 are greater than the maximum chlorine input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in § 63.7520 to demonstrate that the HCl emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in § 63.7530(b). In recalculating the maximum chlorine input and establishing the new operating limits, you are not required to conduct fuel analyses for and include the fuels described in § 63.7510(a)(2)(i) through (iii). [IFG will likely demonstrate HCl compliance through source testing. The Chilco boiler only burns wood and bark, and IFG does not foresee ever using a different fuel type.](#)

§ 63.7540(a)(5) *et seq.* If you demonstrate compliance with an applicable mercury emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the mercury emission rate using Equation 13 of § 63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section. You are not required to conduct fuel analyses for the fuels described in § 63.7510(a)(2)(i) through (iii). You may exclude the fuels described in § 63.7510(a)(2)(i) through (iii) when recalculating the mercury emission rate. [IFG may demonstrate mercury compliance through fuel analysis. The Chilco boiler only burns wood and bark, and IFG does not foresee ever using a different fuel type.](#)

§ 63.7540(a)(6) If you demonstrate compliance with an applicable mercury emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum mercury input using Equation 8 of § 63.7530. If the results of recalculating the maximum mercury input using Equation 8 of § 63.7530 are higher than the maximum mercury input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in § 63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in § 63.7530(b). You are not required to conduct fuel analyses for the fuels described in § 63.7510(a)(2)(i) through (iii). You may exclude the fuels described in § 63.7510(a)(2)(i) through (iii) when recalculating the mercury emission rate. IFG may demonstrate mercury compliance through source testing. The Chilco boiler only burns wood and bark, and IFG does not foresee ever using a different fuel type.

§ 63.7540(a)(7) If your unit is controlled with a fabric filter... Does not apply.

§ 63.7540(a)(8) To demonstrate compliance with the applicable alternative CO CEMS ...IFG does not intend to use this provision of the rule.

§ 63.7540(a)(9) The owner or operator of a boiler or process heater using a PM CPMS or a PM CEMS ...IFG does not intend to use this provision of the rule.

§ 63.7540(a)(10) *et seq.* If your boiler or process heater has a heat input capacity of 10 million Btu per hour or greater, you must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of this section. This frequency does not apply to limited-use boilers and process heaters, as defined in § 63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio. IFG will conduct the annual boiler tune-ups on the hog fuel boiler as required. If IFG installs a continuous oxygen trim system that maintains an optimum air to fuel ratio, they will switch to the 5-year tune up schedule for the hog fuel boiler. If the natural gas is still on site on the compliance date (January 31, 2016), IFG will also conduct a tune-up on the natural gas boiler.

§ 63.7540(a)(11) If your boiler or process heater has a heat input capacity of less than 10 million Btu per hour ... Does not apply.

§ 63.7540(a)(12) If your boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million Btu per hour and the unit is in the units designed to burn gas 1; units designed to burn gas 2 (other); or units designed to burn light liquid subcategories, or meets the definition of limited-use boiler or process heater in § 63.7575, you must conduct a tune-up of the boiler or process heater every 5 years as specified in paragraphs (a)(10)(i) through (vi) of this section to demonstrate continuous compliance. You may delay the burner inspection specified in paragraph (a)(10)(i) of this section until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months. If IFG installs a continuous oxygen trim system that maintains an optimum air to fuel ratio, they will switch to the 5-year tune up schedule for the hog fuel boiler.

§ 63.7540(a)(13) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. Noted.

§ 63.7540(a)(14) If you are using a CEMS measuring mercury emissions to meet requirements ... Does not apply.

§ 63.7540(a)(15) If you are using a CEMS to measure HCl emissions ... Does not apply.

§ 63.7540(a)(16) If you demonstrate compliance with an applicable TSM emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, ...[The IFG Chilco boiler burns only wood and bark, and no new fuel will be used.](#)

§ 63.7540(a)(17) If you demonstrate compliance with an applicable TSM emission limit through fuel analysis for solid or liquid fuels, and you plan to burn a new type of fuel, [The IFG Chilco boiler burns only wood and bark, and no new fuel will be used.](#)

§ 63.7540(a)(18) If you demonstrate continuous PM emissions compliance with a PM CPMS ... [Does not apply.](#)

§ 63.7540(a)(19) If you choose to comply with the PM filterable emissions limit by using PM CEMS ... [Does not apply.](#)

§ 63.7540(b) You must report each instance in which you did not meet each emission limit and operating limit in Tables 1 through 4 or 11 through 13 to this subpart that apply to you. These instances are deviations from the emission limits or operating limits, respectively, in this subpart. These deviations must be reported according to the requirements in § 63.7550. [IFG will comply with the deviation reporting requirements.](#)

§ 63.7540(c) If you elected to demonstrate that the unit meets the specification for mercury for the unit designed to burn gas 1 subcategory... [Does not apply.](#)

§ 63.7540(d) For startup and shutdown, you must meet the work practice standards according to item 5 of Table 3 of this subpart. [The work practice standards in item 5 of Table 3 will not work for starting a wood-fired boiler. If EPA doesn't correct this item, IFG may apply to EPA for a variance from these practices.](#)

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**§ 63.7541 How do I demonstrate continuous compliance under the emissions averaging provision?** [IFG Chilco does not intend to use the emissions averaging provision because there are not more than one boiler in any one subcategory.](#)

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**§ 63.7545 What notifications must I submit and when?** [Section revised in amendment(s) published January 31, 2013, in 78 FR 7162.]

§ 63.7545(a) You must submit to the Administrator all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.

§ 63.7(b) *Notification of performance test.* (1) The owner or operator of an affected source must notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin to allow the Administrator, upon request, to review and approve the site-specific test plan required under paragraph (c) of this section and to have an observer present during the test. [IFG will notify the Administrator \(DEQ and EPA\) 60 days in advance of a planned MACT compliance test. Only 30-day notice is required for Idaho air permit compliance tests.](#)

§ 63.7(c) *Quality assurance program.* (1) The results of the quality assurance program required in this paragraph will be considered by the Administrator when he/she determines the validity of a performance test. (2)(i) *Submission of site-specific test plan.* Before conducting a required performance test, the owner or operator of an affected source shall develop and, if requested by the Administrator, shall submit a site-specific test plan to the Administrator for approval. The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of

precision, accuracy, and completeness of data. [The pre-test protocol for MACT compliance testing must meet the requirements of this section. This is more detailed than the typical pre-test protocol for a permit compliance test.](#)

§ 63.8(e) *Performance evaluation of continuous monitoring systems* —(1) *General.* When required by a relevant standard, and at any other time the Administrator may require under section 114 of the Act, the owner or operator of an affected source being monitored shall conduct a performance evaluation of the CMS. Such performance evaluation shall be conducted according to the applicable specifications and procedures described in this section or in the relevant standard. (2) *Notification of performance evaluation.* The owner or operator shall notify the Administrator in writing of the date of the performance evaluation simultaneously with the notification of the performance test date required under § 63.7(b) or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required. [IFG will comply with the notification requirements for the hog fuel boiler COMS.](#)

§ 63.8(f)(4 and 6) *Use of an alternative monitoring method.* [IFG does not intend to use any alternative monitoring methods.](#)

§ 63.9(b) *Initial notifications.* (1)(i) The requirements of this paragraph apply to the owner or operator of an affected source when such source becomes subject to a relevant standard... (2) The owner or operator of an affected source that has an initial startup before the effective date of a relevant standard under this part shall notify the Administrator in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard). [IFG must submit the initial notification 120 days after January 31, 2013, which will be May 31, 2013.](#)

§ 63.9(c) *Request for extension of compliance.* If the owner or operator of an affected source cannot comply with a relevant standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with § 63.6(i)(5) of this subpart, he/she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in § 63.6(i)(4) through § 63.6(i)(6). [§ 63.6\(i\)\(4\) through § 63.6\(i\)\(6\) would allow the state to grant up to 1 additional year to comply with the standard, if such additional period is necessary for the installation of controls. IFG could request an extension if it becomes necessary.](#)

§ 63.9(d) *Notification that source is subject to special compliance requirements.* An owner or operator of a new source that is subject to special compliance requirements ... [This does not apply to the IFG Chilco boiler because it is an existing source.](#)

§ 63.9(e) *Notification of performance test.* The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under § 63.7(c), if requested by the Administrator, and to have an observer present during the test. [IFG will notify the Administrator \(DEQ and EPA\) 60 days in advance of a planned MACT compliance test. Only 30-day notice is required for Idaho air permit compliance tests.](#)

§ 63.9(f) *Notification of opacity and visible emission observations.* The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting the opacity or visible emission observations specified in § 63.6(h)(5), if such observations are required for the source by a relevant standard. The notification shall be submitted with the notification of the performance test date, as specified in paragraph (e) of this section, or if no performance test is required or visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under § 63.7, the owner or operator shall deliver or postmark the notification not less than 30 days before the opacity or visible

emission observations are scheduled to take place. [IFG will provide required notifications prior to opacity compliance tests.](#)

§ 63.9(g) *Additional notification requirements for sources with continuous monitoring systems.* The owner or operator of an affected source required to use a CMS by a relevant standard shall furnish the Administrator written notification as follows: (1) A notification of the date the CMS performance evaluation under § 63.8(e) is scheduled to begin, submitted simultaneously with the notification of the performance test date required under § 63.7(b). ... (2) A notification that COMS data results will be used to determine compliance with the applicable opacity emission standard during a performance test required by § 63.7 in lieu of Method 9 or other opacity emissions test method data, ... The notification shall be submitted at least 60 calendar days before the performance test is scheduled to begin. [IFG will submit all source test notifications at least 60 days prior to the scheduled test date.](#)

§ 63.9(h) *Notification of compliance status.* (1) The requirements of paragraphs (h)(2) through (h)(4) of this section apply when an affected source becomes subject to a relevant standard.

§ 63.9(h)(3) After a title V permit has been issued to the owner or operator of an affected source [\[Applies because IFG Chilco has a Title V \(Tier I\) permit\]](#), the owner or operator of such source shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under this part. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard. [IFG must submit compliance status reports to DEQ.](#)

§ 63.7545(b) As specified in § 63.9(b)(2), if you startup your affected source before January 31, 2013, you must submit an Initial Notification not later than 120 days after January 31, 2013. [IFG must submit an initial notification of MACT applicability by May 31, 2013.](#)

§ 63.7545(c) As specified in § 63.9(b)(4) and (5), if you startup your new or reconstructed affected source on or after January 31, 2013, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source. [IFG will comply if they add a new unit in the future.](#)

§ 63.7545(d) If you are required to conduct a performance test you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. [IFG will notify the Administrator \(DEQ and EPA\) 60 days in advance of a planned MACT compliance test. Only 30-day notice is required for Idaho air permit compliance tests.](#)

§ 63.7545(e) If you are required to conduct an initial compliance demonstration as specified in § 63.7530, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to § 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8), as applicable. If you are not required to conduct an initial compliance demonstration as specified in § 63.7530(a), the Notification of Compliance Status must only contain the information specified in paragraphs (e)(1) and (8). [The pre-test protocol for MACT compliance testing must meet the requirements of this section. This is more detailed than the typical pre-test protocol for a permit compliance test. IFG must review the pre-test protocol carefully before it is submitted by the testing firm.](#)

§ 63.7545(f) If you operate a unit designed to burn natural gas, refinery gas, or other gas 1 fuels that is subject to this subpart, and you intend to use a fuel other than natural gas... [Does not apply.](#)

§ 63.7545(g) If you intend to commence or recommence combustion of solid waste... [Does not apply.](#)

§ 63.7545(h) If you have switched fuels or made a physical change to the boiler and the fuel switch or physical change resulted in the applicability of a different subcategory, ... [Does not apply. IFG does not anticipate switching fuels in any boilers.](#)

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**§ 63.7550 What reports must I submit and when?** [Section revised in amendment(s) published January 31, 2013, in 78 FR 7162.]

§ 63.7550(a) You must submit each report in Table 9 to this subpart that applies to you.

§ 63.7550(b) Unless the EPA Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report, according to paragraph (h) of this section, by the date in Table 9 to this subpart and according to the requirements in paragraphs (b)(1) through (4) of this section. For units that are subject only to a requirement to conduct an annual, biennial, or 5-year tune-up according to § 63.7540(a)(10), (11), or (12), respectively, and not subject to emission limits or operating limits, you may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of this section, instead of a semi-annual compliance report. [IFG can submit an annual compliance report for the natural gas boiler, to match the schedule of the tune-ups. IFG will submit semi-annual compliance reports for the hog fuel boiler. The first compliance report is for the period of January 31 – July 31, 2013. That report will be due January 31, 2014. The next compliance report will be for July 1 2013 to December 31, 2013, and will be due January 31, 2014. Subsequent reports will cover each calander half and will be due at the end of July or January.](#)

§ 63.7550(c) *et seq.* A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule. [IFG will submit compliance reports with all the information specified in this paragraph.](#)

§ 63.7550(d) For each deviation from an emission limit or operating limit in this subpart that occurs at an individual boiler or process heater where you are not using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the information required in paragraphs (d)(1) through (3) of this section. [IFG will include all required information in the compliance report. The compliance report will follow this regulation to the letter.](#)

§ 63.7550(e) For each deviation from an emission limit, operating limit, and monitoring requirement in this subpart occurring at an individual boiler or process heater where you are using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the information required in paragraphs (e)(1) through (9) of this section. This includes any deviations from your site-specific monitoring plan as required in § 63.7505(d). [This section applies to opacity from the hog fuel boiler because it will have a COMs \(opacity CMS\). IFG will include all required information in the compliance report. The compliance report will follow this regulation to the letter.](#)

§ 63.7550(f)-(g) [Reserved]

§ 63.7550(h) You must submit the reports according to the procedures specified in paragraphs (h)(1) through (3) of this section. [IFG will submit all reports according to the requirements of this section. IFG will use EPA's electronic reporting systems to submit the reports to EPA.](#)

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**§ 63.7555 What records must I keep?** [Section revised in amendment(s) published January 31, 2013, in 78 FR 7162.]

§ 63.7555(a) You must keep records according to paragraphs (a)(1) and (2) of this section. (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report

that you submitted, according to the requirements in § 63.10(b)(2)(xiv). (2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in § 63.10(b)(2)(viii). IFG must keep copies of all the notifications and reports they submit. Recommend storing records off-site as well.

§ 63.7555(b) For each CEMS, COMS, and continuous monitoring system you must keep records according to paragraphs (b)(1) through (5) of this section. IFG must keep copies of the COMS charts and/or electronic records, as well as all performance test information and reports. Recommend storing records off-site as well.

§ 63.7555(c) You must keep the records required in Table 8 to this subpart including records of all monitoring data and calculated averages for applicable operating limits, such as opacity, pressure drop, pH, and operating load, to show continuous compliance with each emission limit and operating limit that applies to you. IFG will keep COMS records, oxygen records and fuel analysis records as required.

§ 63.7555(d) *et seq.* (d) For each boiler or process heater subject to an emission limit in Tables 1, 2, or 11 through 13 to this subpart, you must also keep the applicable records in paragraphs (d)(1) through (11) of this section. IFG will keep all the applicable records for the hog fuel boiler.

In accordance with § 63.7555(d)(4), A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 7 of § 63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 12 of § 63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl emission rates. IFG will make the calculations as per the required equation and will keep all calculations and supporting information on file.

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(3) In accordance with § 63.7555(d)(5), a copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 8 of § 63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 13 of § 63.7530, that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. IFG will make the calculations as per the required equation and will keep all calculations and supporting information on file.

Comment [SC1]: Applicant: Would you look into this and provide discussions in your form FRA?

7) In accordance with § 63.7555(d)(9), a copy of all calculations and supporting documentation of maximum TSM fuel input, using Equation 9 of § 63.7530...IFG intends to show compliance through PM testing, not through TSM fuel analysis.

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§ 63.7555(e) If you elect to average emissions consistent with § 63.7522...IFG does not intend to use emissions averaging.

§ 63.7555(f) If you elect to use efficiency credits from energy conservation measures to demonstrate compliance according to § 63.7533, you must keep a copy of the Implementation Plan required in § 63.7533(d) and copies of all data and calculations used to establish credits according to § 63.7533(b),

(c), and (f). [IFG will keep all the applicable records if they chose to use efficiency credits from energy conservation measures.](#)

§ 63.7555(g) If you elected to demonstrate that the unit meets the specifications for mercury for the unit designed to burn gas 1 subcategory ... [Does not apply.](#)

§ 63.7555(h) If you operate a unit in the unit designed to burn gas 1 subcategory that is subject to this subpart, and you use an alternative fuel ... [Does not apply.](#)

§ 63.7555(i) You must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown. [IFG will keep the required startup and shut down records.](#)

§ 63.7555(j) You must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown. [IFG will keep the required startup and shut down records.](#)

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**§ 63.7560 In what form and how long must I keep my records?** [IFG will keep the records in the format required for at least 5 years.](#)

§ 63.7560(a) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1).

§ 63.7560(b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

§ 63.7560(c) You must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1). You can keep the records off site for the remaining 3 years.

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**§ 63.7565 What parts of the General Provisions apply to me?**

Table 10 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you. [Table 10 is included at the end of this analysis showing which General Provisions apply to IFG Chilco.](#)

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**Tables to Subpart DDDDD  
 Including only the items that apply to IFG Chilco**

Table 1 contains no applicable emission limits for new boilers.

**Table 2: Emission Limits for Existing Boilers and Process Heaters  
 [Units with heat input capacity of 10 million Btu per hour or greater]**

| If your boiler or process heater is in this subcategory ...        | For the following pollutants ... | The emissions must not exceed the following emission limits, except during startup and shutdown...                                                                            | The emissions must not exceed the following alternative output-based limits, except during startup and shutdown...           | Using this specified sampling volume or test run duration...                                                                                                         |
|--------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Units in all subcategories designed to burn solid fuel.         | a. HCl.....                      | 2.2E-02 lb per MMBtu of heat input.                                                                                                                                           | 2.5E-02 lb per MMBtu of steam output or 0.27 lb per MWh.                                                                     | For M26A, collect a minimum of 1 dscm per run; for M26 collect a minimum of 120 liters per run.                                                                      |
|                                                                    | b. Mercury.....                  | 5.7E-06 lb per MMBtu of heat input.                                                                                                                                           | 6.4E-06 lb per MMBtu of steam output or 7.3E-05 lb per MWh.                                                                  | For M29, collect a minimum of 3 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 \b\ collect a minimum of 3 dscm. |
| 2,3,4,5,6                                                          | Do not apply.                    |                                                                                                                                                                               |                                                                                                                              |                                                                                                                                                                      |
| 7. Stokers/sloped grate/others designed to burn west biomass fuel. | a. CO (or CEMS)...               | 1,500 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (720 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average). | 1.4 lb per MMBtu of steam output or 17 lb per MWh; 3-run average.                                                            | 1 hr minimum sampling time.                                                                                                                                          |
|                                                                    | b. Filterable PM (or TSM).       | 3.7E-02 lb per MMBtu of heat input; or (2.4E-04 lb per MMBtu of heat input).                                                                                                  | 4.3E-02 lb per MMBtu of steam output or 5.2E-01 lb per MWh; or (2.8E-04 lb per MMBtu of steam output or 3.4E-04 lb per MWh). | Collect a minimum of 2 dscm per run.                                                                                                                                 |
| 8,9,10,11,12,13,14,15,16,17,18                                     | Do not apply.                    |                                                                                                                                                                               |                                                                                                                              |                                                                                                                                                                      |

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(1) The output-based emission limits, in units of pounds per megawatt-hour, in Tables 1 or 2 to this subpart are an alternative applicable only to boilers that generate electricity according to § 63.7500(a)(1).

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**Table 3: Work Practices Standards**

| If your unit is...                                                                                                                                                                                                                                                                                                                                                                                         | You must meet the following...                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. A new or existing boiler or process heater with a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million Btu per hour in any of the following subcategories: unit designed to burn gas 1; unit designed to burn gas 2 (other); or unit designed to burn light liquid, or a limited use boiler or process heater.</p> | <p>Conduct a tune-up of the boiler or process heater every 5 years as specified in § 63.7540.</p> <p><u>IFG could follow the 5-year schedule if they installed a continuous oxygen trim system that maintains an optimum air to fuel ratio.</u></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <p>2. This requirement does not apply because both Chilco boilers are larger than 10 mmBtu/hr.</p>                                                                                                                                                                                                                                                                                                         | <p>Conduct a tune-up of the boiler or process heater biennially as specified in § 63.7540.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p>3. A new or existing boiler or process heater without a continuous oxygen trim system and with heat input capacity of 10 million Btu per hour or greater.<br/><u>This requirement applies to both the natural gas boiler and the wood-fired boiler.</u></p>                                                                                                                                             | <p>Conduct a tune-up of the boiler or process heater annually as specified in § 63.7540. Units in either the Gas 1 or Metal Process Furnace subcategories will conduct this tune-up as a work practice for all regulated emissions under this subpart. Units in all other subcategories will conduct this tune-up as a work practice for dioxins/furans.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <p>4. An existing boiler or process heater located at a major source facility, not including limited use units.<br/><u>This requirement applies to both the hog fuel boiler and to the natural gas boiler if it is kept on site until the compliance date.</u></p>                                                                                                                                         | <p>Must have a one-time energy assessment performed on the major source facility by 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:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                            | <p>a. A visual inspection of the boiler or process heater system.</p> <p>b. An evaluation of operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.</p> <p>c. An inventory of major energy consuming systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.</p> <p>d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.</p> <p>e. A review of the facility's energy management practices and provide recommendations for improvements consistent with the definition of energy management practices, if identified.</p> <p>f. A list of cost-effective energy conservation measures that are within the facility's control.</p> <p>g. A list of the energy savings potential of the energy conservation measures identified.</p> <p>h. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.</p>                                                                                                                                                                                     |
| <p>5. An existing or new boiler or process heater subject to emission limits in Table 1 or 2 or 11 through 13 to this subpart during startup.<br/><u>This requirement applies to the wood-fired boiler.</u></p>                                                                                                                                                                                            | <p>You must operate all CMS during startup.</p> <p>For startup of a boiler or process heater, you must use one or a combination of the following clean fuels: natural gas, synthetic natural gas, propane, distillate oil, syngas, ultra-low sulfur diesel, fuel oil-soaked rags, kerosene, hydrogen, paper, cardboard, refinery gas, and liquefied petroleum gas.</p> <p>If you start firing coal/solid fossil fuel, biomass/bio-based solids, heavy liquid fuel, or gas 2 (other) gases, you must vent emissions to the main stack(s) and engage all of the applicable control devices except limestone injection in fluidized bed combustion (FBC) boilers, dry scrubber, fabric filter, selective non-catalytic reduction (SNCR), and selective catalytic reduction (SCR). You must start your limestone injection in FBC boilers, dry scrubber, fabric filter, SNCR, and SCR systems as expeditiously as possible. Startup ends when steam or heat is supplied for any purpose. You must comply with all applicable emission limits at all times except for startup or shutdown periods conforming with this work practice. You must collect monitoring data during periods of startup, as specified in §63.7535(b). You must keep records during periods of startup. You must provide reports concerning activities and periods of startup, as specified in §63.7555.</p> |

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NESHAPS Subpart DDDDD Regulatory Analysis  
 Idaho Forest Group – Chilco

| If your unit is...                                                                                                                                                                                                    | You must meet the following...                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6. An existing or new boiler or process heater subject to emission limits in Table 1 or 2 or 11 through 13 to this subpart during shutdown.<br><br><a href="#">This requirement applies to the wood-fired boiler.</a> | You must operate all CMS during shutdown.<br>While firing coal/solid fossil fuel, biomass/bio-based solids, heavy liquid fuel, or gas 2 (other) gases, you must vent emissions to the main stack(s) and engage all of the applicable control devices except limestone injection in FBC boilers, dry scrubber, fabric filter, SNCR, and SCR.<br>You must comply with all applicable emission limits at all times except for startup or shutdown periods conforming with this work practice. You must collect monitoring data during periods of startup, as specified in §63.7535(b). You must keep records during periods of startup. You must provide reports concerning activities and periods of startup, as specified in §63.7555. |

~~~~~  
Sc Comment from Permit: Applicant: Is the follow comment accurate? I plan to put it into the permit and SOB. At the time of permit issuance, the boiler does not have with a continuous oxygen trim system that maintains an optimum air to fuel ratio.

Response: Please don't put this comment in. The compliance date is a long way off and IFG will likely have the trim system by then.

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Table 4: Operating Limits for Boilers and Process Heaters

When complying with a Table 1,2,11,12, or 13 numerical emission limit using...	You must meet these operating limits...
1,2,3,4,5	Do not apply.
6. Any other add-on air pollution control type on units not using a PM CPMS. <u>Applies to the IFG Chilco hog fuel boiler, which is controlled by a multidone followed by an electrified filter bed (EFB).</u>	This option is for boilers and process heaters that operate dry control systems. Existing and new boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (block daily average).
7. Fuel analysis. <u>IFG may use fuel analysis to demonstrate compliance with HCl and mercury emission limits. The only fuel to be used is hog fuel, so the only differences in HCl and mercury would be naturally occurring variations.</u>	Maintain the fuel type or fuel mixture such that the applicable emission rates calculated according to §63.7530(c)(1), (2) and/or (3) is less than the applicable emission limits.
8. Performance testing. <u>IFG will use performance testing to demonstrate compliance with one or more emission limits.</u>	For boilers and process heaters that demonstrate compliance with a performance test, maintain the operating load of each unit such that it does not exceed 110 percent of the highest hourly average operating load recorded during the most recent performance test.
9. Oxygen analyzer system. <u>IFG will comply with this requirement.</u>	For boilers and process heaters subject to a CO emission limit that demonstrate compliance with an O ₂ analyzer system as specified in §63.7525(a), maintain the 30-day rolling average oxygen content at or above the lowest hourly average oxygen concentration measured during the most recent CO performance test, as specified in Table 8. This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in §63.7525(a).
10. Does not apply.	

Table 5 lists the performance testing requirements. IFG will need to review all source test protocols very carefully to verify that they conform to the requirements listed in Table 5.

Table 6 lists the fuel analysis requirements. If IFG decides to demonstrate compliance through fuel analysis, they will need to follow the requirements in Table 6 for sample collection and analysis.

Table 7: Establishing Operating Limits

If you have an applicable emission limit for . . .	And your operating limits are based on ...	You must...	Using ...	According to the following requirements
1. PM, TSM, or mercury...	a. Wet scrubber operating parameters	Does not apply		
	b. Electrostatic precipitator operating parameters (option only for units that operate wet scrubbers).	Does not apply		
2. HCl	a. Wet scrubber operating parameters	Does not apply		
	b. Dry scrubber operating parameters.	Does not apply		
	c. Alternative maximum SO ₂ emission rate	Does not apply		
3. Mercury	All Activated carbon injection...	Does not apply		
4. Carbon Monoxide This applies to the hog fuel boiler.	a. oxygen...	i. Establish a unit-specific limit for minimum oxygen level according to §63.7525.	(1) data from the oxygen analyzer system specified in §63.7525(a).	(a) You must collect oxygen data every 15 minutes during the entire period of the performance test. (b) Determine the hourly average oxygen concentration by computing the hourly averages using all of the 15-minute readings taken during each performance test. (c) Determine the lowest hourly average established during the performance test as your minimum operating limit.
5. Any pollutant for which compliance is demonstrated by a performance test. This applies to the hog fuel boiler.	a. Boiler or process heater operating load	i. Establish a unit-specific limit for maximum operating load §63.7520(c).	(1) Data from the operating load monitors or from steam generation monitors.	(a) You must collect operating load or steam generation data every 15 minutes during the entire period of the performance test. (b) Determine the average operating load by computing the hourly averages using all of the 15-minute readings taken during each performance test. (c) Determine the average of the three test run averages during the performance test, and multiply this by 1.1 (110 percent) as your operating limit.

Table 8: Demonstrating Continuous Compliance

If you must meet the following operating limits or work practice standards...	You must demonstrate continuous compliance by ...
1. Opacity... IFG must install and operate a COMS on the hog fuel boiler.	a. Collecting the opacity monitoring system data according to §63.7525(c) and §63.7535; and b. reducing the opacity monitoring data to 6-minute averages; and c. Maintaining opacity to less than or equal to 10 percent (daily block average).
2 – 7	Do not apply.
8. Emission limits using fuel analysis	a. conduct monthly fuel analysis for HCl or mercury or TSM according to Table 6 to this subpart; and B. Reduce the data to 12-month rolling averages; and c. Maintain the 12-month rolling average at or below the applicable emission limit for HCl or mercury or TSM in Tables 1 and 2 or 11 through 13 to this subpart.
9. Oxygen content	a. Continuously monitor the oxygen content using an oxygen analyzer according to §63.7525(a). This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in §63.7525(a)(2). b. Reducing the data to 30-day rolling averages; and c. Maintain the 30-day rolling average oxygen content at or above the lowest hourly average oxygen level measured during the most recent CO performance test.
10. Boiler or process heater operating load.	a. Collecting and operating load data or steam generation data every 15 minutes. b. Maintaining the operating load such that it does not exceed 110 percent of the highest hourly average operating load recorded during the most recent performance test according to §63.7520(c)
11.	Does not apply.

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NESHAPS Subpart DDDDD Regulatory Analysis  
 Idaho Forest Group – Chilco

Table 9: Demonstrating Continuous Compliance

| You must submit a(n)                                                                            | The report must contain...                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | You must submit the report...                                                                      |
|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 1. Compliance Report<br><br><a href="#">IFG will have to do semi-annual compliance reports.</a> | a. Information required in §63.7550(c)(10 through (5); and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Semiannually, annually, biennially, or every 5 years according to the requirements in §63.7550(b). |
|                                                                                                 | b. If there are no deviations from any emission limitation (emission limit and operating limit) that applies to you and there are no deviations from the requirements for work practice standards in Table 3 to this subpart that apply to you, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control as specified in § 63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and |                                                                                                    |
|                                                                                                 | c. If you have a deviation from any emission limitation (emission limit and operating limit) where you are not using a CMS to comply with that emission limit or operating limit, or a deviation from a work practice standard during the reporting period, the report must contain the information in § 63.7550(d); and                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                    |
|                                                                                                 | d. If there were periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control as specified in § 63.8(c)(7), or otherwise not operating, the report must contain the information in § 63.7550(e)                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                    |

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 Table 10 – Applicability of General Provisions to Subpart DDDDD, does not have specific requirements for IFG.  
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Tables 11 through 13 do not apply to IFG Chilco.

**Idaho Forest Group, Chilco**  
**Responses to DEQ Comments and Questions on the Chilco Tier I Application**

The responses to comments are included. A revised emissions inventory (EI) is attached.

1. *PM<sub>2.5</sub> Fractions.* *Would you provide supporting documents for PM<sub>2.5</sub> fractions used in the calculation (i.e., 10% for material handling, 50% for dry kiln, and 80% for the hog fuel boiler)? I was not able to find PM<sub>2.5</sub> information from AQGP-010. CARB has a document regarding “Particle size fraction data for source categories”. IFG may use CARB’s doc.*

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The revised PM<sub>2.5</sub> fraction estimates for material handling are based on the database for EPA’s PM Calculator Program (<http://www.epa.gov/ttn/chief/eiinformation.html>). The values are based on the SCC codes as listed in the right hand column of the spreadsheet. Review of the CARB data, indicated that the PM<sub>2.5</sub> fractions were based on a 1979 study, so IFG decided to stay with the values developed using EPA’s PM Calculator. The PM Calculator may be based on the same 1979 study as there is very little basic research to support the PM<sub>2.5</sub> fractionations.

The EPA PM Calculator lists emission factors based on SCC activity code. In general, the information shows that for a planer shavings cyclone with baghouse (SCC 30700805), the PM<sub>10</sub> is 30% of PM and PM<sub>2.5</sub> is 20% of PM, so PM<sub>2.5</sub> is 67% of PM<sub>10</sub>. For green material handling (SCC 30700803), PM<sub>10</sub> is 35% of PM and PM<sub>2.5</sub> is 11% of PM, so PM<sub>2.5</sub> is 31% of PM<sub>10</sub>. For dry material handling (SCC 30700822), PM<sub>10</sub> is 51% of PM and PM<sub>2.5</sub> is 15% of PM, so PM<sub>2.5</sub> is 29% of PM<sub>10</sub>. For practical purposes, the revised Chilco EI uses PM<sub>2.5</sub> equal to 30% of PM<sub>10</sub> for all material handling sources.

The PM<sub>2.5</sub> fraction from the hog fuel boiler was originally estimated as 80% of the PM<sub>10</sub>, but upon closer evaluation it has been changed to 90%. Table 1.6-1 of AP-42 lists filterable and condensable PM emissions from wood-fired boilers with electrolyzed gravel bed emissions control as follows:

|                   |                                                          |                        |
|-------------------|----------------------------------------------------------|------------------------|
| PM                | = 0.1 lb/MMBtu filterable + 0.017 lb/MMBtu condensable   | = 0.117 lb/MMBtu total |
| PM <sub>10</sub>  | = 0.074 lb/MMBtu filterable + 0.017 lb/MMBtu condensable | = 0.091 lb/MMBtu       |
| PM <sub>2.5</sub> | = 0.065 lb/MMBtu filterable + 0.017 lb/MMBtu condensable | = 0.082 lb/MMBtu       |

Using this information, the ratio of PM<sub>2.5</sub> to PM<sub>10</sub> is 0.081/0.092 = 90%.

The PM<sub>2.5</sub> fraction for the dry kilns is estimated to be 50% of the PM<sub>10</sub>. The PM<sub>10</sub> factor comes from the Oregon General Permit AQGP-010, but the PM<sub>2.5</sub> fraction is an assumption. This assumption is known to have been allowed in Oregon for an ACDP permit renewal application.

2. *Material Handling Emission Factors.* *Would you provide the source/supporting document for PM<sub>10</sub> EF of 0.05 lbs/ton, General Material handling Factor, used in Logs and Barks worksheet, Planer worksheet, and other worksheets? I was not able to find PM<sub>10</sub> EF of 0.05 lbs/ton for Bin Truck Loadout in DEQ’s 1999 EF list for wood industry. Would you provide the source/supporting document for the EF? This EF for bin truck loadout is used in the sawmill and planer worksheets.*

Wood residual (bark, sawdust, chips, sanderdust) material handling emission factors have been an issue in air quality permitting for a long time. The Idaho 1999 emission factors list the emissions from bin venting and bin unloading of wood waste as 1.0 and 2.0 pounds per tons handled. These factors came from the Old AP-42 Section 10.4, dated February, 1980. EPA has since removed this AP-42 section and never replaced it. The footnotes to Table 10.4-2 of the old AP-42 Section 10.4 state that the fugitive emission factors are based on “engineering judgment based on plant visits”.

Over the years I made numerous plant visits and have found that the old AP-42 emission factors were not at all consistent with my own observations. Over the years, I’ve noted that the amount of airborne dust (not large wood pieces falling to the ground) generated from most wood handling operations is similar to the amount of dust seen around a target box on a pneumatic transport system. A target box is used at the end of a transport pipe to direct the transported material and the air stream into the associated bin. Target boxes are different from cyclones and are generally a little more dusty.

Since the EPA factors adopted by Idaho were based on engineering judgment, it is acceptable to apply additional engineering judgment in trying to establish more accurate emission factors. Over the years, I’ve also found that Oregon DEQ has a thorough and consistent methodology for establishing emissions factors for the wood products industry. The Oregon DEQ general permit application for sawmills (<http://www.deq.state.or.us/aq/permit/acdp/general/aggp110.pdf>) contains emission factors for target boxes handling sanderdust as follows: PM, 0.1 lb/BDT, PM10, 0.05 lb/BDT. Sanderdust is the driest and smallest of the wood residuals produced at a sawmill, so is expected to have the highest fugitive dust emissions. The units of lb/BDT stand for pounds per bone dry ton, which implies that the weight of wood residuals handled has been reduced by the percent of moisture present. Using the sanderdust factor for bark, chips and sawdust provides a level of conservatism, as does applying the factor to the total product weight rather than to the bone dry weight.

Based on the engineering judgment described above, fugitive dust emissions from wood residual handling throughout the IFG Chilco mill are based on the emission factors of 0.1 lb/ton for PM and 0.05 lb/ton for PM10. The apportionment for PM2.5 is discussed below. In the IFG Chilco application, the emission factors described above are referred to as the “General material Handling Factor”. Future permit applications will include more complete descriptions of the methodology used to develop this and other emission factors.

Consistency is very valuable in air quality emissions estimates, especially over time at the same facility. These same emission factors were used in the 2004 original Chilco permit application, the 2005 PTC application, the 2005 Tier I application, and the 2009 Tier I renewal application. The Chilco site was owned by Louisiana-Pacific Corporation and was permitted as a sawmill only, prior to purchase by Rile Creek in 2003. The only two permitted point sources at Chilco were the Sawmill Chip Bin Vent and the Sawmill Sawdust Bin Vent. PM<sub>10</sub> emissions from those sources were estimated using a factor of 0.05 lb/ton, presumably by DEQ.

3. *Dry Kiln Emission Factors.* Would you provide the supporting documents for VOC EFs and HAP EFs used for drying kilns emissions estimation? Would you provide facility’s drying temperatures for different wood species?

IFG has done considerable research into VOC and HAP emission factors from dry kilns, and the influence of wood species and temperature on the emissions. A write-up explaining the dry kiln VOC and HAP emission factors is attached.

4. ***Firewater Pump.** There are errors in calculating emissions in tons/year for all pollutants for firewater pump. Would you correct them? According to EPA's memo, 500 hrs/yr is the default operating hours for an emergency generator when calculating the emergency generator's PTE. However, 120 hrs/yr is used in the IFG - Chilco calculation for the Laclede fire-water pump engine. IFG- Chilco is required to justify why using 120 hrs/yr for Laclede fire-water pump engine PTE calculation. Alternatively, IFG-Chilco can simply use EPA's default 500 hrs/hr without justification.*

Apologies for the errors in the Firewater Pump information. The revised EI is based on 500 hours per year, and the calculation error has been corrected. Any references to Laclede were in error, and will be corrected. IFG will review and resubmit the Chilco FRA attachment for Subpart ZZZZ and incorporate DEQ comments. We appreciate the thorough review on this item.

## Tessa Stevens

---

**From:** Diane Lorenzen <dlorenzen@pioneer-technical.com>  
**Sent:** Thursday, November 15, 2012 11:04 AM  
**To:** Shawnee Chen  
**Cc:** Benda, Larry  
**Subject:** RE: Ask for info. on IDAHO FOREST GROUP LLC - RILEY CREEK-CHILCO - T1-2012.0065 PROJ 61124 - T1 renewal  
**Attachments:** IFG\_Chilco\_Response to comments\_unsigned\_11152012.docx; Chilco\_PTE\_2012 - r1.xls; Evaluation of Dry Kiln VOC and HAP emission factors\_r1.doc  
**Follow Up Flag:** Follow up  
**Flag Status:** Flagged  
**Categories:** Red Category

Shawnee,

The responses to your questions and comments on the Chilco Tier I application are attached. This submittal is ready for IDEQ to use, but we need to have it officially submitted with a signature from the Responsible Official. When we have ironed out all the details, IFG will submit the final official submittal. If you see any errors in this information, please let me know so we don't have to make two signed submittals from the Responsible Official.

I will revised the Form FRA for ZZZZ based on your comments, this afternoon.

Thanks for your help.

Diane R. Lorenzen, P.E.  
Pioneer Technical Services, Inc.  
820 E. Broadway, Suite B  
Missoula, MT 59802  
Phone: (406)-549-0210  
Cell: (406)-531-0195

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**From:** [Shawnee.Chen@deq.idaho.gov](mailto:Shawnee.Chen@deq.idaho.gov) [<mailto:Shawnee.Chen@deq.idaho.gov>]  
**Sent:** Friday, November 09, 2012 2:27 PM  
**To:** [dlorenzen@pioneer-technical.com](mailto:dlorenzen@pioneer-technical.com)  
**Cc:** [Shawnee.Chen@deq.idaho.gov](mailto:Shawnee.Chen@deq.idaho.gov); [LBENDA@idfg.com](mailto:LBENDA@idfg.com)  
**Subject:** Ask for info. on IDAHO FOREST GROUP LLC - RILEY CREEK-CHILCO - T1-2012.0065 PROJ 61124 - T1 renewal

Diane,

I am working on the permit and need the following information to complete the permit. Would you get your response back to me by next Friday (11/16/2012)? If you need more time, please let me know.

PM<sub>2.5</sub> fractions

1. Would you provide supporting documents for PM<sub>2.5</sub> fractions used in the calculation (i.e., 10% for material handling, 50% for dry kiln, and 80% for the hog fuel boiler)?

I was not able to find PM<sub>2.5</sub> information from AQGP-010. CARB has a document regarding "Particle size fraction data for source categories". It can be found at <http://www.arb.ca.gov/ei/speciate/dnldopt.htm#specprof>. IFG may use CARB's doc.

### Emissions factors

#### *Material Handling*

2. Would you provide the source/supporting document for PM<sub>10</sub> EF of 0.05 lbs/ton, General Material handling Factor, used in Logs and Barks worksheet, Planer worksheet, and other worksheets?

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### Others

#### *Firewater Pump*

4. There are errors in calculating emissions in tons/year for all pollutants for firewater pump. Would you correct them?
5. According to EPA's memo, 500 hrs/yr is the default operating hours for an emergency generator when calculating the emergency generator's PTE. However, 120 hrs/yr is used in the IFG - Chilco calculation for the Laclede fire-water pump engine. IFG- Chilco is required to justify why using 120 hrs/yr for Laclede fire-water pump engine PTE calculation. Alternatively, IFG-Chilco can simply use EPA's default 500 hrs/hr without justification. EPA's memo can be found at: <http://www.epa.gov/region07/air/title5/t5memos/emgen.pdf>.
6. Please fill out Form EU1 Industrial Engine for Laclede fire-water pump engine. The form is available at DEQ's website at <http://www.deq.idaho.gov/permitting/air-quality-permitting/forms-checklists.aspx>.
7. Please respond the questions/comments in the attached WORD file regarding 40 CFR 63 Subpart ZZZZ for the firewater pump engine.

Would you get your response back to me by next Friday (11/16/2012)? If you need more time, please let me know.

Thanks and have a great weekend!  
Shawnee

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