COAL CREEK ENVIRONMENTAL ASSOCIATES, LLC

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DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE A Q PROGRAM

4621 118th Ave SE
Bellevue, WA 98006

www.coalcreekenv.com

Phone: 425-373-4888
~~Fax: 425-979-4888~~
Cell: 425-922-0444
Fax: 425-818-0841

October 15, 2012

Stationary Source Permit Program Coordinator
Idaho Department of Environmental Quality, Air Quality Division
1410North Hilton
Boise, ID 83706

SUBJECT: Application for Renewal of Tier I Air Operating Permit for Rexburg Facility of Basic American Foods
CCEA #120101.52

On behalf of Basic American Foods (BAF), Coal Creek Environmental Associates (CCEA) is submitting the enclosed Application for Renewal of Tier I Air Operating Permit for the Rexburg Facility of Basic American Foods. Please contact me if you have questions or need additional information.

Yours truly,

Stephen J. Nelson, PE
President
Coal Creek Environmental Associates, LLC

Cc: BAF – John Kirkpatrick
BAF – Bruce Wright

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DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE A.Q. PROGRAM

BASIC AMERICAN FOODS

Application for Renewal of Tier I Air Operating Permit

Rexburg Facility of Basic American Foods

October 2012

Coal Creek Environmental Associates, LLC
Bellevue, WA 98006

Project 120101.52

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An envelope containing a data disc with a copy of an Excel spreadsheet used to calculate estimated emissions is bound into this application behind the appendices.

1. INTRODUCTION

This document is an Application for renewal of Tier I Air Operating Permit No. T1-060315 ("the current Permit") for the Rexburg Facility of Basic American Foods (BAF) located in Rexburg, ID (AIRS Facility No. 065-000068). The current Permit will expire April 16, 2013. Per Condition 18 of the General Provisions of the current Permit and IDAPA 58.01.01.313.03, BAF is required to submit an application for renewal of the current Permit no later than six months prior to expiration of the current permit, which would be Oct 16, 2012.

This application incorporates by reference information provided in the previous Tier I permit applications for the Rexburg Facility. This application provides additional or modified information only where there has been a change in facilities and operations since the previous Tier I permit application.

Appendix A includes DEQ Forms CSTI and GI. Form GI includes the certification of the application by a responsible official of BAF. Appendix A also contains DEQ Equipment Data Forms for the updated Boiler 2 and DEQ Form FRA. Equipment data forms for other emissions units and emissions control devices are not included because the information requested on these forms has been supplied to DEQ in previous applications and is unchanged.

2. FACILITY INFORMATION

The Rexburg Facility is located in unincorporated land immediately north of the Rexburg City Limits. The Rexburg Facility is bounded on the south by the South Fork of the Teton River, and on the east by the Union Pacific Railroad tracks. Access to the Rexburg Facility is from North Salem Road at East 7th North. Site maps were provided in the previous Tier I permit application.

The Rexburg Facility is a food drying and dehydrating plant. Processes and operations at the Rexburg Facility are as described in the previous Tier I permit application. During the life of the current permit Boiler 2 was changed from an Erie City 35 MMBTU/hr boiler to a 49.9 MMBTU/hr Murray boiler. The existing Tier I permit was modified January 19, 2011 to reflect this change.

Appendix B presents a current facility emissions inventory for NSR Regulated Air Pollutants and Hazardous Air Pollutants (HAPs), with calculation details, including emission factors selected, production rates, and calculations of annual emissions. An electronic copy of an Excel spreadsheet used to create the tables in Appendix B is included with this application.

The Appendix B emission inventory included with this application incorporates the following changes to the emission inventories submitted with the previous application:

1. The replacement of Boiler 2 at the facility.

   The previous Boiler 2 was a 35 MMBTU/hr Lake City boiler. The current boiler is a 49.9 MMBTU/hr Murray boiler.

2. Revisions to the PM and PM-10 emission factors for stack 7019.

   Based on stack testing conducted of a similar process stack at BAF's Blackfoot Facility, the emission factors for stack 7019 at the Rexburg Facility have been changed from 0.116 and 0.083 to 0.029 and 0.0195 lb/1000 lbs throughput for PM and PM-10, respectively. Details of the testing program and the basis for the revisions to the emissions factors are presented in BAF's report *"Review of Results of November 2011 Source Testing at Blackfoot Facility of Basic American Foods and Development of Revised Emission Factors, April 2012"*, previously submitted to DEQ by BAF.

3. Inclusion of estimates of potential emissions for greenhouse gases (GHG) and carbon dioxide equivalents (CO2e).

   Note that while the plant potential to emit for GHG calculated as the sum of GHG emissions for all emissions units exceeds 100,000 tpy, the Rexburg Facility has a facility-wide cap on GHG of 99,000 tpy.

3. APPLICABLE REGULATORY REQUIREMENTS

The Rexburg Facility is subject to various federal and state air pollution control regulations. Appendix C lists identified applicable regulatory rules, including regulatory citations. Applicability of most of these rules to the Rexburg Facility has previously been reviewed by DEQ during previous permitting activities. In those situations Appendix C includes a reference to the DEQ permitting action containing the regulatory applicability analysis and applicability of the rule is not considered further in this application. Appendix D lists air pollution control rules that are either inapplicable to the Rexburg Facility or do not have relevant content for Tier I permitting purposes. Appendix E contains a regulatory analysis for rules that have not previously been analyzed for applicability

As indicated in Appendix C the following applicable rules have not been incorporated into previous Tier I permitting activities for the Rexburg Facility:

- Revised and updated EPA Maximum Available Control Technology standards for boilers at area sources (Area Source Boiler MACT), located in 40 CFR 63, Subpart JJJJJ.
- The Non-Hazardous Secondary Materials Rule (NHSM) codified at 40 CFR 241.
- The Greenhouse Gas (GHG) reporting rules, 40 CFR 98
- Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule (GHG Tailoring Rule), affecting Parts 51, 52, 70, and 71 of 40 CFR.

Additional information on each of these rules is presented below.

40 CFR 63, SUBPART JJJJJJ (AREA SOURCE BOILER MACT)

Description of Requirement

The Area Source Boiler MACT (40 CFR 63 Subpart JJJJJJ) was adopted in March 2011. As an existing biomass-fired unit, the Kipper Boiler is subject to various emissions limits and work practice standards of the Area Source Boiler MACT.

The table below summarizes requirements of Subpart JJJJJJ applicable to the Kipper boiler. Refer to Appendix E for a detailed identification of applicable portions of Subpart JJJJJJ.

Citation	Requirements	Compliance Date
63.11201(a)	Comply with the emission limits listed in Table 1 of Subpart JJJJJ: • Existing coal-fired units ≥ 10 MMBTU/hr – Hg: 0.0000048lb/MMBTU heat input – CO: 400 ppmvd at 3% O2 • Existing biomass-fired units: None	March 21, 2014[2]
63.11201(b)	Comply with work practice standards, emission reduction measures, and management practices listed in Table 2 of Subpart JJJJJJ: • Existing coal-fired units ≥ 10 MMBTU/hr – Minimize the boiler's startup and shutdown periods following the manufacturer's recommended procedures. If manufacturer's recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available.[3] – Conduct a tune-up of the boiler biennially – Conduct a one-time energy assessment performed by a qualified energy assessor • Existing biomass-fired units ≥ 10 MMBTU/hr: – Conduct a tune-up of the boiler biennially – Conduct a one-time energy assessment performed by a qualified energy assessor	March 21, 2014 for energy assessment; March 21, 2012 for all other requirements (Note that enforcement of the boiler tune-up requirement is currently the subject of EPA's "No Action Assurance" Memorandum[4])

[2] Note that the while the Kipper Boiler is permitted to co-fire up to 50 percent coal with wood waste (on a heat-input basis), the Kipper Boiler has not yet combusted coal. If the Kipper Boiler does not combust coal until after March 21, 2014 BAF presumes the effective date would be the date that coal is first combusted in the Kipper Boiler.

[3] This requirement would apply only during periods when the Kipper Boiler is co-firing coal and biomass.

[4] Memorandum July 18, 2012 to Gina McCarty, EPA Assistant Administrator, Office of Air and Radiation, from Cynthia Giles, Assistant Administrator, Office of Enforcement and Compliance Assurance. http://www.epa.gov/ttn/atw/boiler/20120718memo.pdf

Citation	Requirements	Compliance Date
63.11201(c)	Comply with operating limits for boilers with emissions limits as listed in Table 3 of Subpart JJJJJ: • Wet Scrubber: Maintain the pressure drop at or above the lowest 1-hour average pressure drop across the wet scrubber and the liquid flow-rate at or above the lowest 1-hour average liquid flow rate measured during the most recent performance test demonstrating compliance with the PM emission limitation.[5]	March 21, 2014

Compliance Status

As described above, the requirements to tune the boiler biennially and to conduct a one-time energy assessment of the facility are applicable regardless of whether the Kipper Boiler combusts only biomass or co-fires coal with biomass. The compliance date for these requirements is March 21, 2014. BAF completed tune-up of the boiler in accordance with the procedures and requirements of Subpart JJJJJ on March 31, 2012.

Additional provisions of Subpart JJJJJ apply to the Kipper Boiler only if coal is co-fired with biomass. The Kipper Boiler has not yet co-fired coal with biomass (except for a brief test burn shortly after boiler installation) and BAF does not intend to co-fire coal with biomass as long as adequate supplies of biomass are available. Under these circumstances BAF presumes that the compliance date for standards that are applicable only in the case of coal firing would be the date on which BAF commences coal co-firing, and that in accordance with §63.11210(b) of Subpart JJJJJ, BAF would have 180 days after that compliance date to demonstrate initial compliance with applicable emissions limits.

40 CFR 63 Subpart DDDD is not applicable because the Rexburg Facility is not a major source for Hazardous Air Pollutants.

40 CFR 241 (NHSM RULE)

Description of Requirement

The Non-Hazardous Secondary Materials (NHSM) rule, 40 CFR 241, was adopted by EPA on March 21, 2011 as part of a package of rules involving combustion units. The NHSM rule establishes criteria for identifying NHSM that are not solid waste when combusted in a boiler. This distinction is important in differentiating "boilers" from "solid waste incinerators". Because the Kipper Boiler fires biomass, compliance with the NHSM rule is required to ensure that operation of the Kipper Boiler is subject to the area source Boiler MACT and not the CISWI Area

[5] Because the Kipper Boiler is subject to Subpart JJJJJ emissions limits only when co-firing coal, the Subpart JJJJJ operating limits for the wet scrubber apply only when co-firing coal.

Source Emissions Guideline (40 CFR 60 Subpart DDDD). Refer to Appendix E for a detailed regulatory applicability analysis of 40 CFR 241.

40 CFR 241.2 defines "*traditional fuels*" as materials that are produced as fuels and are unused products that have not been discarded and therefore are not solid wastes. This definition of *traditional fuels* specifically includes "*cellulosic biomass (virgin wood)*"

40 CFR 241.3 establishes that the following materials are not solid wastes when combusted:

(1) Non-hazardous secondary materials used as a fuel in a combustion unit that remain within the control of the generator and that meet the legitimacy criteria specified in §241.3(d)(1).

(2) The following non-hazardous secondary materials that have not been discarded and meet the legitimacy criteria specified in paragraph §241.3(d)(1) when used in a combustion unit (by the generator or outside the control of the generator):

  (i) Scrap tires used in a combustion unit that are removed from vehicles and managed under the oversight of established tire collection programs.

  (ii) Resinated wood used in a combustion unit.

...

(4) Fuel or ingredient products that are used in a combustion unit, and are produced from the processing of discarded non-hazardous secondary materials and that meet the legitimacy criteria specified in §241.3(d)(1), with respect to fuels, ... The legitimacy criteria apply after the non-hazardous secondary material is processed to produce a fuel or ingredient product.

The legitimacy criteria of §241.3(d)(1) for non-hazardous secondary materials used as a fuel in combustion units include the following:

(i) The non-hazardous secondary material must be managed as a valuable commodity based on the following factors:

  (A) The storage of the non-hazardous secondary material prior to use must not exceed reasonable time frames;

  (B) Where there is an analogous fuel, the non-hazardous secondary material must be managed in a manner consistent with the analogous fuel or otherwise be adequately contained to prevent releases to the environment;

  (C) If there is no analogous fuel, the non-hazardous secondary material must be adequately contained so as to prevent releases to the environment;

(ii) The non-hazardous secondary material must have a meaningful heating value and be used as a fuel in a combustion unit that recovers energy.

(iii) The non-hazardous secondary material must contain contaminants at levels comparable in concentration to or lower than those in traditional fuels which the combustion unit is

designed to burn. Such comparison is to be based on a direct comparison of the contaminant levels in the non-hazardous secondary material to the traditional fuel itself.

Compliance Status

Biomass fired in the Kipper Boiler originates from the following three sources:

- Slash and related materials generated in logging operations

  These materials are cellulosic biomass (virgin wood). They are recognized as commercially valuable fuels by the producers and are managed as such. Because of the commercial value of these materials, at no point in the management of these materials are they ever discarded. Accordingly these materials are "*traditional fuels*" as defined in 40 CFR 241.2 and thus are not "solid waste".

- Bark, wood chips and shavings generated from the production of wood and wood products.

  These materials include both virgin wood materials, which are "*cellulosic biomass (virgin wood)*" as discussed above, and "*resinated wood*" materials as defined in 40 CFR 241.2[6]. These materials are recognized as commercially valuable fuels by the producers and are managed as such. The virgin wood materials from these sources are "*traditional fuels*" as defined in 40 CFR 241.2 and thus are not "solid waste". Per 40 CFR 241.3(b)(2)(ii), resinated woods are not solid wastes when combusted.

- Wood sourced from landfills

  Wood sourced from landfills is construction debris that is processed at the landfill to segregate clean wood from other construction debris. After this processing, the materials are commercially valuable biomass and are managed and stored by the producers in a manner consistent with analogous biomass fuels. The heat value of this fuel is no less than virgin wood; in fact the net heat provided is often higher than that for virgin wood due to lower moisture content of the landfill-sourced wood.

  BAF believes that its landfill-sourced wood will contain contaminants at levels comparable in concentration to or lower than those in traditional fuels that the Kipper Boiler is permitted to burn (including coal). BAF intends to demonstrate compliance with the legitimacy criteria by testing the wood sourced from landfills to verify that it meets the legitimacy criteria of 40 CFR 241.3(d)(1). If the landfill-sourced wood does not meet legitimacy criteria BAF will not combust landfill-sourced wood until compliance with the legitimacy criteria can be established. If compliance with the legitimacy criteria cannot be established and BAF should decide to continue combusting wood sourced from landfills, BAF will redesignate the Kipper Boiler as an existing Commercial and Industrial Solid Waste Incinerators (CISWI) unit that will be regulated accordance with the emission guideline of 40 CFR 60, Subpart DDDD.

[6] Per 40 CFR 241.2: "*resinated wood* means wood products (containing resin adhesives) derived from primary and secondary wood products manufacturing and comprised of such items as board trim, sander dust, and panel trim."

40 CFR 98 (GHG REPORTING RULE)

Description of Requirement

The GHG Reporting Rule at 40 CFR 98 requires that GHG emissions from the Rexburg Facility be reported to EPA if GHG emissions from stationary fuel combustion exceed 25,000 metric tons per year. The GHG Reporting Rule requires only reporting, and does not establish emissions limits or create work practice or operating requirements intended to limit emissions. The GHG Reporting Rule is also self-implementing, without requiring the issuance of regulatory agency permits or approvals. As such it is cited as a potentially applicable requirement under the Clean Air Act, but no implementation provisions need be included in the Tier I air operating permit.

Compliance Status

Per 40 CFR 98.2(b)(2), carbon dioxide emissions from the combustion of biomass are to be excluded from calculation against the threshold quantity, but emissions of CH_4 and N_2O from biomass combustion are to be included. Because of the exclusion of carbon dioxide emissions from biomass, the Rexburg facility has consistently emitted GHGs well below the mandatory reporting threshold and reporting of GHG emissions has not been required for the Rexburg Facility. However, potential GHG emissions from non-biomass fuel combustion at the Rexburg Facility do exceed 25,000 metric tons per year. In the future should GHG emissions from non-biomass stationary fuel combustion exceed the reporting limit BAF will complete the needed reports.

GHG TAILORING RULE

The GHG Tailoring Rule incorporates GHG emissions into provisions of the Major New Source permitting program (located in 40 CFR Parts 51 and 52) and the Title V Air Operating Permit Program (located in 40 CFR Parts 70 and 71). Because the Rexburg Facility has a 99,000 tpy enforceable limit on GHG emissions, provisions of the GHG tailoring rule are not applicable to the Rexburg Facility.

4. INAPPLICABLE RULES AND REQUIREMENTS

In addition to the new applicable rules described above, other new potentially applicable rules or requirements listed below have been determined to be inapplicable for specific technical reasons. . BAF requests that these determinations be included in the Tier I permit shield.

Rule	Basis
GHG Tailoring Rule	Rexburg Facility total GHG emissions are limited by permit to no more than 99,000 tpy. This is below the 100,000 tpy threshold applicability limit for the GHG tailoring rule.

Rule	Basis
Major Source MACT for Boilers and Process Heaters (40 CFR 63 Subpart DDDD)	This rule is applicable to boilers and process heaters located at major sources of Hazardous Air Pollutants (HAPs). Because the Rexburg Facility is not a major source of HAPs, Subpart DDDDD is not applicable.
Standards of Performance for Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001 (40 CFR 60 Subpart CCCC)	This rule is not applicable because the boilers at the Rexburg Facility do not combust any materials which are classed as solid waste for which construction, modification, or reconstruction commenced after the applicability dates established by this rule.
Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units (40 CFR 60 Subpart DDDD)	This rule, which is to be implemented by either modifying a State Implementation Plan or by creating a Federal Implementation, is not applicable because all non-hazardous secondary materials combusted at the Rexburg Facility are not classed as solid waste per 40 CFR 241.3.

5. COMPLIANCE CERTIFICATION

The Rexburg Facility is currently in compliance with all applicable air quality regulations. Appendix F provides a detailed analysis of specific applicable requirements, including descriptions of how compliance status was determined, and what the continuing compliance demonstration procedures will be.

6. COMPLIANCE PLAN AND SCHEDULE

The only changes in applicable federal or state rules that might come into effect during the permit term that BAF is aware of are possible changes in the Boiler MACT rules for area sources. The possible changes to the rules that EPA has announced it is considering will not significantly affect BAF's compliance status.

Although the Kipper Boiler is capable of burning coal and is permitted to co-fire coal with biomass (at up to 50 percent of boiler heat input) BAF has not combusted coal in the Kipper Boiler and does not have any current plans to do so. The Boiler MACT rules have extensive requirements that are applicable to coal-fired boilers, with a compliance date of March 21, 2014. BAF does not believe it would be economically or environmentally appropriate to commence co-firing of coal in the Kipper Boiler solely for purposes of establishing compliance by the March 21, 2014 deadline. In lieu of conducting test-firing of coal BAF requests that the Tier I permit include terms and provisions that:

- Recognize that coal co-firing in the Kipper Boiler after March 21, 2014 is subject to emissions limits and operating limits of Subpart JJJJJ pertaining to coal combustion
- Defer inclusion of the provisions of Subpart JJJJJ pertaining to coal co-firing in the Tier I Permit until such time as BAF decides to combust co-fire coal in the Kipper Boiler.

- Require that BAF notify DEQ and EPA of its intent to commence coal co-firing in the Kipper
- Comply with the requirements of Subpart JJJJJ pertaining to coal combustion at the time coal co-firing commences or March 20, 2014, whichever is later.
- Stipulate that BAF demonstrate initial compliance with the requirements of Subpart JJJJJ within 180 days after commencing coal-firing, consistent with 40 CFR 63.11210(b).

Should any new requirements come into effect during the life of the permit, BAF will adhere to the compliance schedule provided in the rule.

7. PERMIT SHIELD REQUEST

In submitting this Application for a Tier I Permit, BAF requests that the Tier I permit include a Permit Shield. In accordance with IDAPA 58.01.01.325, BAF requests that the Permit Shield state that compliance with the terms and conditions of the Tier I operating permit, including those applicable to all alternative operating scenarios and trading scenarios, shall be deemed compliance with all of the following

- Applicable requirements as of the date of permit issuance that are specifically identified in the Tier I operating permit and have a corresponding term or condition in the Tier I operating permit.
- Inapplicable Rules and Requirements.

APPENDIX A

TIER I PERMIT APPLICATION FORMS

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
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	Basic American Foods, a Division of Basic American, Inc.		
2. Facility Name	Rexburg Facility	3. Facility ID No.	065-00008
4. Brief Project Description - One sentence or less	Tier I Permit Renewal		

PERMIT APPLICATION TYPE

5. ☐ Initial Tier I ☐ Tier I Administrative Amendment ☐ Tier I Minor Modification ☐ Tier I Significant Modification
☒ Tier I Renewal: Permit No.: T1-060315 Date Issued: April 16, 2008

FORMS INCLUDED

Included	N/A	Forms		DEQ Verify
☒	☐	Form CSTI – Cover Sheet		☐
☒	☐	Form GI – Facility Information		☐
☒	☐	Form EU0 – Emissions Units General		☐
☐	☒	Form EU1– Industrial Engine Information	Please specify number of EU1s attached: ____	☐
☐	☒	Form EU2– Nonmetallic Mineral Processing Plants	Please specify number of EU2s attached: ____	☐
☐	☒	Form EU3– Spray Paint Booth Information	Please specify number of EU3s attached: ____	☐
☐	☒	Form EU4– Cooling Tower Information	Please specify number of EU4s attached: ____	☐
☒	☐	Form EU5 – Boiler Information	Please specify number of EU5s attached: 1	☐
☐	☒	Form CBP– Concrete Batch Plant	Please Specify number of CBPs attached: ____	☐
☐	☒	Form HMAP – Hot Mix Asphalt Plant	Please specify number of HMAPs attached:	☐
☐	☒	PERF – Portable Equipment Relocation Form		☐
☐	☒	Form BCE– Baghouses Control Equipment		☐
☐	☒	Form SCE– Scrubbers Control Equipment		☐
☐	☒	Form VSCE – Venturi Scrubber Control Equipment		☐
☐	☒	Form ESP – Electrostatic Precipitator		☐
☐	☒	Form AO – Afterburner/Oxidizer		☐
☐	☒	Form CYS – Cyclone Separator		☐
☐	☒	Form CA – Carbon Adsorber		☐
☒	☐	Forms EI-CP1 - EI-CP4– Emissions Inventory– criteria pollutants	(Excel workbook, all 4 worksheets)	☐
☐	☒	Form CAM – Compliance Assurance Monitoring		☐
☒	☐	Form FRA – Federal Regulation Applicability		☐

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:
Basic American Foods, A Division of Basic American, Inc.	Rexburg Facility
3. Brief Project Description:	Application for Renewal of Tier I Air Operating Permit

FACILITY INFORMATION

4. Primary Facility Permit Contact Person/Title	John Kirkpatrick		Idaho Campus Environmental Manager	
5. Telephone Number and Email Address	208-785-8572		jkirkpatrick@baf.com	
6. Alternate Facility Contact Person/Title	Bruce Wright		Corporate Environmental Manager	
7. Telephone Number and Email Address	208-785-8590		bwright@baf.com	
8. Address to Which the Permit Should be Sent	415 West Collins Road			
9. City/County/State/Zip Code	Blackfoot	Bingham	ID	83221
10. Equipment Location Address (if different than the mailing address above)	40 East 7th North			
11. City/County/State/Zip Code	Rexburg	Madison	ID	83440
12. Is the Equipment Portable?	☐ Yes ☒ No			
13. SIC Code(s) and NAICS Code	Primary SIC: 2034	Secondary SIC: 2034	NAICS: 311423	
14. Brief Business Description and Principal Product	vegetable dehydration			
15. Indentify any adjacent or contiguous facility that this company owns and/or operates	None			
16. Specify the reason for the application	☐ Permit to Construct (PTC) 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. ☐ Incorporate the PTC at the time of the Tier I renewal ☐ Co-process the Tier I modification and PTC ☐ Administratively amend the Tier I permit to incorporate the PTC upon your request (IDAPA 58.01.01.209.05.a, b, or c) ☒ Tier I Permit ☐ Tier II Permit ☐ 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	Joe Milligan	Rexburg Facility Manager	
18. Responsible Official Address	40 East 7th North		
19. Responsible Official Telephone Number	208-356-3631		
20. Responsible Official Email Address	jmilligan@baf.com		
21. Responsible Official's Signature		Date:	10/12/12

22. ☒ Check here to indicate that you would like to review the draft permit prior to final issuance.

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

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

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

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Basic American Foods, a Division of Basic American	Rexburg Facility	065-00008

4. Brief Project Description: Tier I Permit Renewal

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

5.	Emissions Unit (EU) Name:	BOILER 2
6.	EU ID Number:	BOILER 2
7.	EU Type:	☐ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source -- Previous Permit #: Date Issued:
8.	Manufacturer:	MURRAY
9.	Model:	MCF3-43
10..	Maximum Capacity:	49.9 MMBTU/HR
11.	Date of Construction:	2010 (INSTALLED)
12.	Date of Modification (if any):	
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT

14. Control Equipment Name and ID:

15. Date of Installation: 16. Date of Modification (if any):

17. Manufacturer and Model Number:

18. ID(s) of Emission Unit Controlled:

19. Is operating schedule different than emission units(s) involved? ☐ Yes ☐ No

20. Does the manufacturer guarantee the control efficiency of the control equipment? ☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency						

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

22.	Actual Operation:	VARIES
23.	Maximum Operation:	8760 HR/YR

REQUESTED LIMITS

24. Are you requesting any permit limits? ☐ Yes ☒ No (If Yes, indicate all that apply below)

- ☐ Operation Hour Limit(s):
- ☐ Production Limit(s):
- ☐ Material Usage Limit(s):
- ☐ Limits Based on Stack Testing: Please attach all relevant stack testing summary reports
- ☐ Other:

25. Rationale for Requesting the Limit(s):

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

Emissions Units - Industrial Boiler Information **Form EU5**
Revision 5
08/28/08

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

IDENTIFICATION

1. Company Name:	2. Facility Name:	3 Facility ID No:
Basic American Foods, a Division of Basic American Inc.	Rexburg Facility	065-00008
4. Brief Project Description:	Tier I Permit Renewal	

EXEMPTION

Please see IDAPA 58.01.01.222 for a list of industrial boilers that are exempt from Permit to Construct requirements.

BOILER (EMISSION UNIT) DESCRIPTION AND SPECIFICATIONS

5. Type of Request: ☐ New Unit ☐ Unpermitted Existing Unit ☐ Modification to a Unit with Permit #:

6. Use of Boiler: ☒ % Used For Process ☐ % Used For Space Heat ☐ % Used For Generating Electricity ☐ Other:

7. Boiler ID Number: Boiler 2	8. Rated Capacity: ☒ 49.9 Million British Thermal Units Per Hour (MMBtu/hr) ☐ 1,000 Pounds Steam Per Hour (1,000 lb steam/hr)	
9. Construction Date: 2010 (Installation Date)	10. Manufacturer: Murray	11. Model: MCF3-43
12. Date of Modification (if applicable):	13. Serial Number (if available): 10509	14. Control Device (if any): **Note: Attach applicable control equipment form(s)**

FUEL DESCRIPTION AND SPECIFICATIONS

15. Fuel Type	☐ Diesel Fuel (#) (gal/hr)	☒ Natural Gas (cf/hr)	☐ Coal (unit: /hr)	☐ Other Fuels (unit: /hr)
16. Full Load Consumption Rate		48921		
17. Actual Consumption Rate		48921		
18. Fuel Heat Content (Btu/unit, LHV)		1020		
19. Sulfur Content wt%		0.2 gr/Ccf		
20. Ash Content wt%		N/A		

STEAM DESCRIPTION AND SPECIFICATIONS

21. Steam Heat Content	NA	NA		
22. Steam Temperature (°F)	N/A	N/A		
23. Steam Pressure (psi)	N/A	N/A		
24 Steam Type	N/A	N/A	☐ Saturated ☐ Superheated	☐ Saturated ☐ Superheated

OPERATING LIMITS & SCHEDULE

25. Imposed Operating Limits (hours/year, or gallons fuel/year, etc.):	
26. Operating Schedule (hours/day, months/year, etc.):	varies
27. NSPS Applicability: ☒ Yes ☐ No	If Yes, which subpart: Dc

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: Basic American Foods, a Division of Basic America	2. Facility Name: Rexburg Facility
3. Brief Project Description: Tier I Permt Renewal	

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): Subpart Dc – Applicability reviewed previously. See *"Statement of Basis, Permit to Construct No. P-2011.0132,Project ID 60943, Basic American Foods – Rexburg, Rexburg, Idaho, Facility ID 065-00008, Final"*, June 1, 2012 ☐ Not Applicable
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): 40 CFR 63, Subpart JJJJJJ. Detailed regulatory analysis included in Appendix E of this application. Analysis also includes related regulatory information in 40 CFR Part 241. ☐ Not Applicable
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.	☑ A detailed regulatory review is provided (Follow instructions and example). ☑ DEQ has already been provided a detailed regulatory review. Give a reference to the document including the date.

IF YOU ARE UNSURE HOW TO ANSWER ANY OF THESE QUESTIONS, CALL THE AIR PERMIT HOTLINE AT 1-877-5PERMIT

It is emphasized that it is the applicant's responsibility to satisfy all technical and regulatory requirements, and that DEQ will help the applicant understand what those requirements are prior to the application being submitted but that DEQ will not perform the required technical or regulatory analysis on the applicant's behalf.

APPENDIX B

FACILITY EMISSION INVENTORY

Summary of Potential Emissions -
Rexburg Facility of Basic American Foods

Production Process	Stack Identification	Estimated Annual Emissions, tons									
		CO	NOX	SO2	PM	PM-10	VOC	Lead	GHG	CO2e	Total HAP
Boilers	Kipper Boiler	263.9	123.2	214.0	74.7	71.2	12.9	1.89E-02	75,277	76,831	8.56
Boilers	Boiler 1	18.76	22.33	0.54	1.70	1.70	1.23	1.12E-04	26,623	26,649	0.42
Boilers	Boiler 2	18.00	21.43	0.51	1.63	1.63	1.18	1.07E-04	25,548	25,573	0.40
Process A	7020	-	-	-	3.13	1.82	-	NA	NA	NA	0.00
Process A	7101	7.40	1.42	0.51	12.51	9.47	0.15	1.40E-05	3,328	3,331	0.05
Process A	7102	7.40	1.42	0.51	12.51	9.47	0.15	1.40E-05	3,328	3,331	0.05
Process A	7019	7.52	1.45	0.96	5.18	3.48	0.16	1.42E-05	3,379	3,382	0.05
Process A	7001	-	-	0.11	1.18	1.03	-	NA	NA	NA	0.00
Process A	7027	-	-	-	0.34	0.18	-	NA	NA	NA	0.00
Process A	7006	-	-	-	0.89	0.54	-	NA	NA	NA	0.00
Process B	5034	-	-	-	0.22	0.07	-	NA	NA	NA	0.00
Process B	5037	-	-	8.19	7.52	5.66	-	NA	NA	NA	0.00
Process B	4000	-	-	1.14	8.81	7.53	-	NA	NA	NA	0.00
Process B	228	11.00	2.12	0.84	5.61	4.80	0.23	2.07E-05	4,946	4,951	0.08
Process B	234	7.33	1.41	0.28	1.61	1.37	0.15	1.38E-05	3,297	3,300	0.05
Process B	311	-	-	0.20	1.50	1.28	-	NA	NA	NA	0.00
Process B	312	-	-	0.20	1.50	1.28	-	NA	NA	NA	0.00
Process B	410/411	-	-	0.39	3.01	2.57	-	NA	NA	NA	0.00
Process B	613/614	-	-	0.74	5.60	4.80	-	NA	NA	NA	0.00
Process B	615/616	-	-	0.56	4.38	3.74	-	NA	NA	NA	0.00
Process B	638	-	-	0.16	1.24	1.05	-	NA	NA	NA	0.00
Process B	707	-	-	-	0.01	0.01	-	NA	NA	NA	0.00
Process B	725	-	-	-	0.21	0.21	-	NA	NA	NA	0.00
Process B	8	-	-	-	0.21	0.21	-	NA	NA	NA	0.00
Process B	5001	-	-	-	2.13	1.07	-	NA	NA	NA	0.00
Process B	5000	-	-	-	0.21	0.21	-	NA	NA	NA	0.00
Process B	432	-	-	-	0.21	0.21	-	NA	NA	NA	0.00
Process B	322	-	-	-	0.00	0.00	-	NA	NA	NA	0.00
Process B	572	-	-	-	1.00	0.25	-	NA	NA	NA	0.00
	Total - Stacks	341.3*	174.7	229.8	158.8	136.8	16.1	0.02	145,726	147,348*	9.67

* The plant has a 249 tpy enforceable limit on CO emissions.

** The plant has a 99,000 tpy enforceable limit on CO2e emissions.

Fugitive Emissions

Plant	Woodpile	-	-	-	28.16	7.04	14.92	NA	NA	NA	0.00
Plant	Heaters	17.54	3.37	0.32	0.50	0.50	0.36	3.31E-05	7,885	7,892	0.12
Plant	Plant Roads	-	-	-	-	-	-	NA	NA	NA	0.00

Table B-1. Potential Sources of Air Pollutant Emissions

Production Process	Stack Identification Code	POTENTIAL EMISSION GENERATING ACTIVITY							
		CO	NOx	SO2	PM-10	VOC	Lead	GHG	CO2e
Boilers	Kipper Boiler	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion
Plant	Woodpile	None	None	None	Wind erosion and material handling	Evaporation of volatile organic compounds	None	None	None
Boilers	Boiler 1	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion
Boilers	Boiler 2	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion
Process A	7020	None	None	None	Entrainment of particulates in unit process exhaust	None	None	None	None
Process A	7101	Fuel combustion	Fuel combustion	Fuel combustion and conversion of sulfite to SO2	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion
Process A	7102	Fuel combustion	Fuel combustion	Fuel combustion and conversion of sulfite to SO2	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion
Process A	7019	Fuel combustion	Fuel combustion	Fuel combustion and conversion of sulfite to SO3	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion
Process A	7001	None	None	Conversion of sulfite to SO2	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	None	None	None	None
Process A	7027	None	None	None	Entrainment of particulates in unit process exhaust	None	None	None	None
Process A	7006	None	None	None	Entrainment of particulates in unit process exhaust	None	None	None	None
Process B	5034	None	None	None	Entrainment of particulates in unit process exhaust	None	None	None	None
Process B	5037	None	None	Conversion of sulfite to SO2	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	None	None	None	None
Process B	4000	None	None	Conversion of sulfite to SO3	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	None	None	None	None
Process B	228	Fuel combustion	Fuel combustion	Fuel combustion and conversion of sulfite to SO2	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion
Process B	234	Fuel combustion	Fuel combustion	Fuel combustion and conversion of sulfite to SO2	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion
Process B	311	None	None	Conversion of sulfite to SO3	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	None	None	None	None

* In gas fired processing units, particulate emissions from combustion are insignifcant in comparison with process particulate emissions.

Table B-1. Potential Sources of Air Pollutant Emissions

Production Process	Stack Identification Code	POTENTIAL EMISSION GENERATING ACTIVITY							
		CO	NOx	SO2	PM-10	VOC	Lead	GHG	CO2e
Process B	312	None	None	Conversion of sulfite to SO3	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	None	None	None	None
Process B	410/411	None	None	Conversion of sulfite to SO3	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	None	None	None	None
Process B	613/614	None	None	Conversion of sulfite to SO3	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	None	None	None	None
Process B	615/616	None	None	Conversion of sulfite to SO3	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	None	None	None	None
Process B	638	None	None	Conversion of sulfite to SO3	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	None	None	None	None
Process B	707	None	None	None	Entrainment of particulates in unit process exhaust	None	None	None	None
Process B	725	None	None	None	Entrainment of particulates in unit process exhaust	None	None	None	None
Process B	8	None	None	None	Entrainment of particulates in unit process exhaust	None	None	None	None
Process B	5001	None	None	None	Entrainment of particulates in unit process exhaust	None	None	None	None
Process B	5000	None	None	None	Entrainment of particulates in unit process exhaust	None	None	None	None
Process B	432	None	None	None	Entrainment of particulates in unit process exhaust	None	None	None	None
Process B	322	None	None	None	Entrainment of particulates in unit process exhaust	None	None	None	None
Process B	572	None	None	None	Entrainment of particulates in unit process exhaust	None	None	None	None
Plant	Heaters	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion	Fuel combustion
Plant	Plant Roads	None	None	None	Vehicle Traffic	None	None	None	None

* In gas fired processing units, particulate emissions from combustion are insignifcant in comparison with process particulate emissions.

Table B-2. Carbon Monoxide Emission Factors

Production Process	Stack Identification Code	Annual Emissions		
		Emission Factor	Units	Basis for Factor
Boilers	Kipper Boiler	0.927	lb CO/000 lbs steam	Because CO emissions are greater with wood-firing than with coal firing, emissions are based on 100% firing with wood fuel. Wood fuel emission factor is from 1994 Source Emission Evaluation Report, adjusted for increase in boiler efficiency due to installation of economizer.
Boilers	Boiler 1	0.082	lb CO/MMBTU	Based on AP-42, Table 1.4-1 (7/98), for uncontrolled combustion in boiler < 100 MMBTU/hr, and assuming 1020 BTU/scf. No difference between hourly and annual emission factors.
Boilers	Boiler 2	0.082	lb CO/MMBTU	Based on AP-42, Table 1.4-1 (7/98), for uncontrolled combustion in boiler < 100 MMBTU/hr, and assuming 1020 BTU/scf. No difference between hourly and annual emission factors.
Process A	7101	0.260	lb CO/MMBTU	Based on results of emission measurements of similar bar burners completed at the BAF Blackfoot Plant. No difference between hourly and annual emission factors.
Process A	7102	0.260	lb CO/MMBTU	Based on results of emission measurements of similar bar burners completed at the BAF Blackfoot Plant. No difference between hourly and annual emission factors.
Process A	7019	0.260	lb CO/MMBTU	Based on results of emission measurements of similar bar burners completed at the BAF Blackfoot Plant. No difference between hourly and annual emission factors.
Process B	228	0.260	lb CO/MMBTU	Based on results of emission measurements of similar bar burners completed at the BAF Blackfoot Plant. No difference between hourly and annual emission factors.
Process B	234	0.260	lb CO/MMBTU	Based on results of emission measurements of similar bar burners completed at the BAF Blackfoot Plant. No difference between hourly and annual emission factors.
Plant	Heaters	0.260	lb CO/MMBTU	Based on results of emission measurements of similar bar burners completed at the BAF Blackfoot Plant. No difference between hourly and annual emission factors.

Table B-3. Estimated Carbon Monoxide Emissions

Production Process	Stack Identification Code	Annual Emissions				
		Emission Factor	Emission Factor Units	Operating Rate	Operating Units	Annual Emissions, tpy
Boilers	Kipper Boiler	0.927	lb CO/000 lbs steam	569,400	000 lbs steam	263.9
Boilers	Boiler 1	0.082	lb CO/MMBTU	455,520	MMBTU	18.76
Boilers	Boiler 2	0.082	lb CO/MMBTU	437,124	MMBTU	18.00
Process A	7101	0.260	lb CO/MMBTU	56,940	MMBTU	7.40
Process A	7102	0.260	lb CO/MMBTU	56,940	MMBTU	7.40
Process A	7019	0.260	lb CO/MMBTU	57,816	MMBTU	7.52
Process B	228	0.260	lb CO/MMBTU	84,622	MMBTU	11.00
Process B	234	0.260	lb CO/MMBTU	56,414	MMBTU	7.33
Plant	Heaters	0.260	lb CO/MMBTU	134,904	MMBTU	17.54

Table B-4. Nitrogen Oxides Emission Factors

Production Process	Stack Identification Code	Annual Emissions		
		Emission Factor	Units	Basis for Factor
Boilers	Kipper Boiler	0.433	lb NOx/000 lbs steam	Because NOx emissions are greater with coal:wood-firing than with only wood firing, emissions are based on firing with a 50% coal:wood mixture. Wood fuel emission factor is from 1994 Source Emission Evaluation Report, adjusted for increase in boiler efficiency due to installation of economizer. Coal emission factor is from AP-42, Table 1.1-3, based on 9500 Btu/lb of coal.
Boilers	Boiler 1	0.098	lb NOx/MMBTU	Based on AP-42, Table 1.4-1 (7/98), for uncontrolled combustion in boiler < 100 MMBTU/hr, and assuming 1020 BTU/scf. No difference between hourly and annual emission factors.
Boilers	Boiler 2	0.098	lb NOx/MMBTU	Based on AP-42, Table 1.4-1 (7/98), for uncontrolled combustion in boiler < 100 MMBTU/hr, and assuming 1020 BTU/scf. No difference between hourly and annual emission factors.
Process A	7101	0.050	lb NOx/MMBTU	Based on results of emission measurements of similar bar burners completed at the BAF Blackfoot Plant. No difference between hourly and annual emission factors.
Process A	7102	0.050	lb NOx/MMBTU	Based on results of emission measurements of similar bar burners completed at the BAF Blackfoot Plant. No difference between hourly and annual emission factors.
Process A	7019	0.050	lb NOx/MMBTU	Based on results of emission measurements of similar bar burners completed at the BAF Blackfoot Plant. No difference between hourly and annual emission factors.
Process B	228	0.050	lb NOx/MMBTU	Based on results of emission measurements of similar bar burners completed at the BAF Blackfoot Plant. No difference between hourly and annual emission factors.
Process B	234	0.050	lb NOx/MMBTU	Based on results of emission measurements of similar bar burners completed at the BAF Blackfoot Plant. No difference between hourly and annual emission factors.
Plant	Heaters	0.050	lb NOx/MMBTU	Based on results of emission measurements of similar bar burners completed at the BAF Blackfoot Plant. Emission factor divided equally between both process stacks.

Table B-5. Estimated Nitrogen Oxides Emissions

Production Process	Stack Identification Code	Annual Emissions				
		Emission Factor	Emission Factor Units	Operating Rate	Operating Units	Annual Emissions, tpy
Boilers	Kipper Boiler	0.433	lb NOx/000 lbs steam	569,400	000 lbs steam	123.2
Boilers	Boiler 1	0.098	lb NOx/MMBTU	455,520	MMBTU	22.33
Boilers	Boiler 2	0.098	lb NOx/MMBTU	437,124	MMBTU	21.43
Process A	7101	0.050	lb NOx/MMBTU	56,940	MMBTU	1.42
Process A	7102	0.050	lb NOx/MMBTU	56,940	MMBTU	1.42
Process A	7019	0.050	lb NOx/MMBTU	57,816	MMBTU	1.45
Process B	228	0.050	lb NOx/MMBTU	84,622	MMBTU	2.12
Process B	234	0.050	lb NOx/MMBTU	56,414	MMBTU	1.41
Plant	Heaters	0.050	lb NOx/MMBTU	134,904	MMBTU	3.37

Table B-6. Sulfur Dioxide Emission Factors

Production Process	Stack Identification Code	Process Related SO2 Emissions			Combustion Related SO2 Emissions		
					Annual Emissions		
		Emission Factor	Emission Factor Units	Basis for Emission Factor	Emsn Factor	Emsn Factor Units	Basis for Emission Factor
Boilers	Kipper Boiler	0.00	NA	NA	214.0000	ton/yr	Enforceable emissions limit.
Boilers	Boiler 1	0.00	NA	NA	0.0024	lb SO2/ MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion and assuming 1020 BTU/scf and assuming 1020 BTU/scf and 0.8 gr/Ccf sulfur content of natural gas.
Boilers	Boiler 2	0.00	NA	NA	0.0024	lb SO2/ MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion and assuming 1020 BTU/scf and assuming 1020 BTU/scf and 0.8 gr/Ccf sulfur content of natural gas.
Process A	7101	0.005	lb SO2/000 lb unit process throughput	Based on results of emission measurements completed on similar dryer at the BAF Blackfoot Plant.	0.0024	lb SO2/ MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion and assuming 1020 BTU/scf and assuming 1020 BTU/scf and 0.8 gr/Ccf sulfur content of natural gas.
Process A	7102	0.005	lb SO2/000 lb unit process throughput	Based on results of emission measurements completed on similar dryer at the BAF Blackfoot Plant.	0.0024	lb SO2/ MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion and assuming 1020 BTU/scf and assuming 1020 BTU/scf and 0.8 gr/Ccf sulfur content of natural gas.
Process A	7019	0.005	lb SO2/000 lb unit process throughput	Based on results of emission measurements completed on similar dryer at the BAF Blackfoot Plant.	0.0024	lb SO2/ MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion and assuming 1020 BTU/scf and assuming 1020 BTU/scf and 0.8 gr/Ccf sulfur content of natural gas.
Process A	7001	0.005	lb SO2/000 lb unit process throughput	Based on results of emission measurements completed on similar dryer at the BAF Blackfoot Plant.	0.0000	NA	NA
Process B	5037	0.11	lbs SO2/000 lbs product	Estimated 10% conversion of sulfite to SO2 within process.	0.0000	NA	NA
Process B	4000	0.065	lbs SO2/000 lbs product	Sum of emissions from stacks 4000, 228 and 234 assumed to be the same as sum of measured emissions from stacks HEB and HNL at Blackfoot Plant. Total process emissions allocated to these stacks based on portion of drying	0.0000	NA	NA

Table B-6. Sulfur Dioxide Emission Factors

Production Process	Stack Identification Code	Process Related SO2 Emissions			Combustion Related SO2 Emissions		
					Annual Emissions		
		Emission Factor	Emission Factor Units	Basis for Emission Factor	Emsn Factor	Emsn Factor Units	Basis for Emission Factor
Process B	228	0.042	lbs SO2/000 lbs product	Sum of emissions from stacks 4000, 228 and 234 assumed to be the same as sum of measured emissions from stacks HEB and HNL at Blackfoot Plant. Total process emissions allocated to these stacks based on portion of drying	0.0024	lb SO2/ MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion and assuming 1020 BTU/scf and assuming 1020 BTU/scf and 0.8 gr/Ccf sulfur content of natural gas.
Process B	234	0.012	lbs SO2/000 lbs product	Sum of emissions from stacks 4000, 228 and 234 assumed to be the same as sum of measured emissions from stacks HEB and HNL at Blackfoot Plant. Total process emissions allocated to these stacks based on portion of drying	0.0024	lb SO2/ MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion and assuming 1020 BTU/scf and assuming 1020 BTU/scf and 0.8 gr/Ccf sulfur content of natural gas.
Process B	311	0.030	lbs SO2/000 lbs product	Sum of emissions from stacks 311, 312, and 410/411 assumed to be the same as sum of measured emissions from stacks HEB and HNL at Blackfoot Plant. 25% of emission assigned to stack 311.	0.0000	NA	NA
Process B	312	0.030	lbs SO2/000 lbs product	Sum of emissions from stacks 311, 312, and 410/411 assumed to be the same as sum of measured emissions from stacks HEB and HNL at Blackfoot Plant. 25% of emission assigned to stack 311.	0.0000	NA	NA
Process B	410/411	0.059	lbs SO2/000 lbs product	Sum of emissions from stacks 311, 312, and 410/411 assumed to be the same as sum of measured emissions from stacks HEB and HNL at Blackfoot Plant. 50% of emission assigned to stack 410/411.	0.0000	NA	NA
Process B	613/614	0.060	lbs SO2/000 lbs product	Sum of emissions from stacks 613/614, 615/616, and 638 assumed to be the same as sum of measured emissions from stacks HEB and HNL at Blackfoot Plant. Emissions allocated to specific stacks in proportion to stack air flow.	0.0000	NA	NA

Table B-6. Sulfur Dioxide Emission Factors

Production Process	Stack Identification Code	Process Related SO2 Emissions			Combustion Related SO2 Emissions		
					Annual Emissions		
		Emission Factor	Emission Factor Units	Basis for Emission Factor	Emsn Factor	Emsn Factor Units	Basis for Emission Factor
Process B	615/616	0.046	lbs SO2/000 lbs product	Sum of emissions from stacks 613/614, 615/616, and 638 assumed to be the same as sum of measured emissions from stacks HEB and HNL at Blackfoot Plant. Emissions allocated to specific stacks in proportion to stack air flow.	0.0000	NA	NA
Process B	638	0.013	lbs SO2/000 lbs product	Sum of emissions from stacks 613/614, 615/616, and 638 assumed to be the same as sum of measured emissions from stacks HEB and HNL at Blackfoot Plant. Emissions allocated to specific stacks in proportion to stack air flow.	0.0000	NA	NA
Plant	Heaters	0.00	NA	NA	0.0024	lb SO2/ MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion and assuming 1020 BTU/scf and assuming 1020 BTU/scf and 0.8 gr/Ccf sulfur content of natural gas.

Table B-7. Estimated Sulfur Dioxide Emissions

Production Process	Stack Code	Process Related SO2 Emissions					Combustion Related SO2 Emissions					Total SO2 Emissions
		Annual Emissions					Annual Emissions					
		Emsn Factor	Emsn Factor Units	Optg. Rate	Optg. Rate Units	Emsn Rate, tpy	Emsn Factor	Emsn Factor Units	Optg. Rate	Optg. Rate Units	Emsn Rate, tpy	Combined Annual Emsns, tpy
Boilers	Kipper Boiler	NA	NA	NA	NA	NA	214.000	ton/yr	1.0	NA	214.00	214.0
Boilers	Boiler 1	NA	NA	NA	NA	NA	0.002	lb SO2/ MMBTU	455,520	MMBTU	0.54	0.5
Boilers	Boiler 2	NA	NA	NA	NA	NA	0.002	lb SO2/ MMBTU	437,124	MMBTU	0.51	0.5
Process A	7101	0.005	lb SO2/000 lb unit process throughput	178,704	000 lb unit process throughput	0.45	0.002	lb SO2/ MMBTU	56,940	MMBTU	0.07	0.5
Process A	7102	0.005	lb SO2/000 lb unit process throughput	178,704	000 lb unit process throughput	0.45	0.002	lb SO2/ MMBTU	56,940	MMBTU	0.07	0.5
Process A	7019	0.005	lb SO2/000 lb unit process throughput	357,408	000 lb unit process throughput	0.89	0.002	lb SO2/ MMBTU	57,816	MMBTU	0.07	1.0
Process A	7001	0.005	lb SO2/000 lb unit process throughput	44,676	000 lb unit process throughput	0.11	NA	NA	NA	NA	NA	0.1
Process B	5037	0.110	lbs SO2/000 lbs product	148,920	lbs SO2/000 lbs product	8.19	NA	NA	NA	NA	NA	8.2
Process B	4000	0.065	lbs SO2/000 lbs product	35,040	lbs SO2/000 lbs product	1.14	NA	NA	NA	NA	NA	1.1
Process B	228	0.042	lbs SO2/000 lbs product	35,040	lbs SO2/000 lbs product	0.74	0.002	lb SO2/ MMBTU	84,622	MMBTU	0.10	0.8
Process B	234	0.012	lbs SO2/000 lbs product	35,040	lbs SO2/000 lbs product	0.21	0.002	lb SO2/ MMBTU	56,414	MMBTU	0.07	0.3
Process B	311	0.030	lbs SO2/000 lbs product	13,140	lbs SO2/000 lbs product	0.20	NA	NA	NA	NA	NA	0.2
Process B	312	0.030	lbs SO2/000 lbs product	13,140	lbs SO2/000 lbs product	0.20	NA	NA	NA	NA	NA	0.2
Process B	410/411	0.059	lbs SO2/000 lbs product	13,140	lbs SO2/000 lbs product	0.39	NA	NA	NA	NA	NA	0.4

Table B-7. Estimated Sulfur Dioxide Emissions

Production Process	Stack Code	Process Related SO2 Emissions					Combustion Related SO2 Emissions					Total SO2 Emissions
		Annual Emissions					Annual Emissions					Combined Annual Emsns, tpy
		Emsn Factor	Emsn Factor Units	Optg. Rate	Optg. Rate Units	Emsn Rate, tpy	Emsn Factor	Emsn Factor Units	Optg. Rate	Optg. Rate Units	Emsn Rate, tpy	
Process B	613/614	0.060	lbs SO2/000 lbs product	24,528	lbs SO2/000 lbs product	0.74	NA	NA	NA	NA	NA	0.7
Process B	615/616	0.046	lbs SO2/000 lbs product	24,528	lbs SO2/000 lbs product	0.56	NA	NA	NA	NA	NA	0.6
Process B	638	0.013	lbs SO2/000 lbs product	24,528	lbs SO2/000 lbs product	0.16	NA	NA	NA	NA	NA	0.2
Plant	Heaters	NA	NA	148,617	NA	NA	0.002	lb SO2/ MMBTU	269,808	MMBTU	0.32	0.3

Table B-8. Total Suspended Particulate Emission Factors

Production Process	Stack Identification Code	Annual Emissions		
		Emission Factor	Units	Basis for Factor
Boilers	Kipper Boiler	0.262	lb PM/000 lbs steam	Because PM emissions are greater with coal:wood-firing than with only wood firing, emissions are based on firing with a 50% coal:wood mixture. Wood fuel emission factor is from 1994 Source Emission Evaluation Report, adjusted for increase in boiler efficiency due to installation of economizer. Coal emission factor is from AP-44, Table 1.1-3, based on 9500 Btu/lb of coal.
Plant	Woodpile	1.000	lb PM/ton of wood handled	From AP-42, Section 10.3 (2/80) for sawdust handling at plywood veneer plant. Maximum wood pile emission occurs when boiler is fired only with wood.
Boilers	Boiler 1	0.007	lb PM/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion and assuming 1020 BTU/scf.
Boilers	Boiler 2	0.007	lb PM/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion and assuming 1020 BTU/scf.
Process A	7020	0.018	lb PM/000 lbs unit process throughput	Based on Method 5 stack test results from February 1998.
Process A	7101	0.140	lb PM/000 lbs unit process throughput	Process and stack similarity to Stack DUT at Blackfoot Plant
Process A	7102	0.140	lb PM/000 lbs unit process throughput	Process and stack similarity to Stack DUT at Blackfoot Plant
Process A	7019	0.029	lb PM/000 lbs unit process throughput	Based on results from Nov. 2011 emissions tests from stack DUV at Blackfoot Facility. See April 2012 report to DEQ on results of stack testing and proposed revisions to emissions factors.
Process A	7001	0.053	lb PM/000 lbs unit process throughput	Process and stack similarity to Stack DSO at Blackfoot Plant
Process A	7027	0.015	lb PM/000 lbs unit process throughput	Process and stack similarity to Stack DSO at Blackfoot Plant
Process A	7006	0.005	lb PM/000 lbs production process output	Process and stack similarity to Stack DUY at Blackfoot Plant
Process B	5034	0.003	lb PM/000 lbs production process output	Process and stack similarity to Stack CHV at Blackfoot Plant
Process B	5037	0.101	lb PM/000 lbs production process output	Process and stack similarity to Stack CIR at Blackfoot Plant
Process B	4000	0.503	lb PM/000 lbs production process output	Total process emission assumed to be the same as Process P8 at Blackfoot Plant; PM emission factor allocated in proportion to stack discharge air flows.
Process B	228	0.320	lb PM/000 lbs production process output	Total process emission assumed to be the same as Process P8 at Blackfoot Plant; PM emission factor allocated in proportion to stack discharge air flows.
Process B	234	0.092	lb PM/000 lbs production process output	Total process emission assumed to be the same as Process P8 at Blackfoot Plant; PM emission factor allocated in proportion to stack discharge air flows.
Process B	311	0.228	lb PM/000 lbs production process output	Process and stack similarity to Process P8 at Blackfoot Plant
Process B	312	0.228	lb PM/000 lbs production process output	Process and stack similarity to Process P8 at Blackfoot Plant
Process B	410/411	0.458	lb PM/000 lbs production process output	Total process emission assumed to be the same as Process P8 at Blackfoot Plant; total process PM emission factor divided equally between stacks.
Process B	613/614	0.457	lb PM/000 lbs production process output	Total process emission assumed to be the same as Process P8 at Blackfoot Plant; total process PM emission factor allocated in proportion to stack discharge air flows.
Process B	615/616	0.357	lb PM/000 lbs production process output	Total process emission assumed to be the same as Process P8 at Blackfoot Plant; total process PM emission factor allocated in proportion to stack discharge air flows.

Table B-8. Total Suspended Particulate Emission Factors

Production Process	Stack Identification Code	Annual Emissions		
		Emission Factor	Units	Basis for Factor
Process B	636	0.101	lb PM/000 lbs production process output	Total process emission assumed to be the same as Process P8 at Blackfoot Plant; total process PM emission factor allocated in proportion to stack discharge air flows.
Process B	707	0.0001	lb PM/000 lb of unit process throughput	Process and stack similarity to Stack EUW at Blackfoot Plant. 90% PM removal assumed to occur in fabric filter.
Process B	725	0.0016	lb PM/000 lb of unit process throughput	Process and stack similarity to Blackfoot Stack CHI. 90% PM removal assumed to occur in fabric filter.
Process B	8	0.0016	lb PM/000 lb of product transported	Process and stack similarity to Blackfoot Stack CHI. 90% PM removal assumed to occur in fabric filter.
Process B	5001	0.0160	lb PM/000 lb of product transported	Process and stack similarity to Blackfoot Stack CHI.
Process B	5000	0.0016	lb PM/000 lb of product transported	Process and stack similarity to Blackfoot Stack CHI. Additional 90% PM removal assumed to occur in fabric filter.
Process B	432	0.0016	lb PM/000 lb of product transported	Process and stack similarity to Blackfoot Stack CHI. Additional 90% PM removal assumed to occur in fabric filter.
Process B	322	0.0160	lb PM/000 lb of product transported	Process and stack similarity to Blackfoot Stack CHI.
Process B	572	0.150	lb PM/000 lb of product transported	AP-42, Table 9.9.1-1 (5/98) for Internal Vibrating Grain Cleaning with cyclone control selected as closest comparable process with emission factor.
Plant	Heaters	0.0075	lb PM/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion and assuming 1020 BTU/scf.
Plant	Plant Roads	17.01	lb PM/hr	AP-42 Section 13.2 used to estimate road emissions. Emission details in Appendix B data tables. Emission factor shown is for annual average.

Table B-9. Estimated Total Particulate Emissions

Production Process	Stack Identification Code	Annual Emissions				
		Emission Factor	Emission Factor Units	Operating Rate	Operating Units	Annual Emissions, tpy
Boilers	Kipper Boiler	0.262	lb PM/000 lbs steam	569,400	000 lbs steam	74.72
Plant	Woodpile	1.000	lb PM/ton of wood handled	56,314	lb PM/ton of wood handled	28.16
Boilers	Boiler 1	0.007	lb PM/MMBTU	455,520	lb PM/MMBTU	1.70
Boilers	Boiler 2	0.007	lb PM/MMBTU	437,124	lb PM/MMBTU	1.63
Process A	7020	0.018	lb PM/000 lbs unit process throughput	357408	lb PM/000 lbs unit process throughput	3.13
Process A	7101	0.140	lb PM/000 lbs unit process throughput	178,704	lb PM/000 lbs unit process throughput	12.51
Process A	7102	0.140	lb PM/000 lbs unit process throughput	178,704	lb PM/000 lbs unit process throughput	12.51
Process A	7019	0.029	lb PM/000 lbs unit process throughput	357,408	lb PM/000 lbs unit process throughput	5.18
Process A	7001	0.053	lb PM/000 lbs unit process throughput	44,676	lb PM/000 lbs unit process throughput	1.18
Process A	7027	0.015	lb PM/000 lbs unit process throughput	44,676	lb PM/000 lbs unit process throughput	0.34
Process A	7006	0.005	lb PM/000 lbs production process output	357,408	lb PM/000 lbs production process output	0.89
Process B	5034	0.003	lb PM/000 lbs production process output	148,920	lb PM/000 lbs production process output	0.22
Process B	5037	0.101	lb PM/000 lbs production process output	148,920	lb PM/000 lbs production process output	7.52
Process B	4000	0.503	lb PM/000 lbs production process output	35,040	lb PM/000 lbs production process output	8.81
Process B	228	0.320	lb PM/000 lbs production process output	35,040	lb PM/000 lbs production process output	5.61
Process B	234	0.092	lb PM/000 lbs production process output	35,040	lb PM/000 lbs production process output	1.61
Process B	311	0.228	lb PM/000 lbs production process output	13,140	lb PM/000 lbs production process output	1.50
Process B	312	0.228	lb PM/000 lbs production process output	13,140	lb PM/000 lbs production process output	1.50
Process B	410/411	0.458	lb PM/000 lbs production process output	13,140	lb PM/000 lbs production process output	3.01
Process B	613/614	0.457	lb PM/000 lbs production process output	24,528	lb PM/000 lbs production process output	5.60
Process B	615/616	0.357	lb PM/000 lbs production process output	24,528	lb PM/000 lbs production process output	4.38
Process B	638	0.101	lb PM/000 lbs production process output	24,528	lb PM/000 lbs production process output	1.24

Table B-9. Estimated Total Particulate Emissions

Production Process	Stack Identification Code	Annual Emissions				
		Emission Factor	Emission Factor Units	Operating Rate	Operating Units	Annual Emissions, tpy
Process B	707	0.000	lb PM/000 lb of unit process throughput	266,304	lb PM/000 lb of unit process throughput	0.01
Process B	725	0.002	lb PM/000 lb of unit process throughput	266,304	lb PM/000 lb of unit process throughput	0.21
Process B	8	0.002	lb PM/000 lb of product transported	266,304	lb PM/000 lb of product transported	0.21
Process B	5001	0.016	lb PM/000 lb of product transported	266,304	lb PM/000 lb of product transported	2.13
Process B	5000	0.002	lb PM/000 lb of product transported	266,304	lb PM/000 lb of product transported	0.21
Process B	432	0.002	lb PM/000 lb of product transported	266,304	lb PM/000 lb of product transported	0.21
Process B	322	0.016	lb PM/000 lb of product transported	99	lb PM/000 lb of product transported	0.00
Process B	572	0.150	lb PM/000 lb of product transported	13,315	lb PM/000 lb of product transported	1.00
Plant	Heaters	0.0075	lb PM/MMBTU	134,904	lb PM/MMBTU	0.50
Plant	Plant Roads	17.010	lb PM/hr	0	lb PM/hr	0.00

Table B-10. PM10 Emission Factors

Production Process	Stack Identification Code	Annual Emissions		
		Emission Factor	Units	Basis for Factor
Boilers	Kipper Boiler	71.200	ton PM-10/yr	Enforceable emissions limit.
Plant	Woodpile	0.250	lb PM-10/ton of wood handled	From AP-42, Section 10.3 (2/80) for sawdust handling at plywood veneer plant. PM-10 is assumed to be 25% of PM. Maximum wood pile emission occurs when boiler is fired only with wood.
Boilers	Boiler 1	0.007	lb PM10/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion and assuming 1020 BTU/scf. All PM assumed to be PM10.
Boilers	Boiler 2	0.007	lb PM10/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion and assuming 1020 BTU/scf. All PM assumed to be PM10.
Process A	7020	0.010	lb PM10/000 lbs unit process throughput	PM10 assumed to be 58.1% of TSP emissions. This fraction is the same as the fraction of solid PM that is PM10 measured in Stack DUT at Blackfoot Plant.
Process A	7101	0.106	lb PM10/000 lbs unit process throughput	Process and stack similarity to Stack DUT at Blackfoot Plant
Process A	7102	0.106	lb PM10/000 lbs unit process throughput	Process and stack similarity to Stack DUT at Blackfoot Plant
Process A	7019	0.0195	lb PM10/000 lbs unit process throughput	Based on results from Nov. 2011 emissions tests from stack DUV at Blackfoot Facility. See April 2012 report to DEQ on results of stack testing and proposed revisions to emissions factors.
Process A	7001	0.046	lb PM10/000 lbs unit process throughput	Process and stack similarity to Stack DSO at Blackfoot Plant
Process A	7027	0.008	lb PM10/000 lbs unit process throughput	Process and stack similarity to Stack DSK at Blackfoot Plant
Process A	7006	0.003	lb PM10/000 lbs production process output	Process and stack similarity to Stack DUY at Blackfoot Plant
Process B	5034	0.001	lb PM10/000 lbs production process output	Process and stack similarity to Stack CHV at Blackfoot Plant
Process B	5037	0.076	lb PM10/000 lbs production process output	Process and stack similarity to Stack CIR at Blackfoot Plant
Process B	4000	0.430	lb PM10/000 lbs production process output	Total process emission assumed to be the same as Process P8 at Blackfoot Plant. Total process PM10 emission factor allocated in proportion to stack discharge air flow.
Process B	228	0.274	lb PM10/000 lbs production process output	Total process emission assumed to be the same as Process P8 at Blackfoot Plant. Total process PM10 emission factor allocated in proportion to stack discharge air flow.
Process B	234	0.078	lb PM10/000 lbs production process output	Total process emission assumed to be the same as Process P8 at Blackfoot Plant. Total process PM10 emission factor allocated in proportion to stack discharge air flow.
Process B	311	0.195	lb PM10/000 lbs production process output	Process and stack similarity to Process P8 at Blackfoot Plant.
Process B	312	0.195	lb PM10/000 lbs production process output	Process and stack similarity to Process P8 at Blackfoot Plant.
Process B	410/411	0.391	lb PM10/000 lbs production process output	Total process emission assumed to be the same as Process P8 at Blackfoot Plant. 50 % of process emissions allocated to this stack.
Process B	613/614	0.391	lb PM10/000 lbs production process output	Total process emission assumed to be the same as Process P8 at Blackfoot Plant. Total process PM10 emission factor allocated in proportion to stack discharge air flow.

Table B-10. PM10 Emission Factors

Production Process	Stack Identification Code	Annual Emissions		
		Emission Factor	Units	Basis for Factor
Process B	615/616	0.305	lb PM10/000 lbs production process output	Total process emission assumed to be the same as Process P8 at Blackfoot Plant. Total process PM10 emission factor allocated in proportion to stack discharge air flow.
Process B	638	0.086	lb PM10/000 lbs production process output	Total process emission assumed to be the same as Process P8 at Blackfoot Plant. Total process PM10 emission factor allocated in proportion to stack discharge air flow.
Process B	707	0.0001	lb PM10/000 lb of unit process throughput	Process and stack similarity to Stack EUW at Blackfoot Plant. 90% PM removal assumed to occur in fabric filter. With fabric filter all PM emitted assumed to be PM-10.
Process B	725	0.0016	lb PM10/000 lb of unit process throughput	Process and stack similarity to Blackfoot Stack CHI. 90% PM removal assumed to occur in fabric filter. With fabric filter all PM emitted assumed to be PM-10.
Process B	8	0.0016	lb PM10/000 lb of product transported	Process and stack similarity to Blackfoot Stack CHI. 90% PM removal assumed to occur in fabric filter. With fabric filter all PM emitted assumed to be PM-10.
Process B	5001	0.0080	lb PM10/000 lb of product transported	Process and stack similarity to Blackfoot Stack CHI. 50.0% of solid TSP emissions assumed to be PM10, based on AP-42 Table 9.9.1-2, Note g.
Process B	5000	0.0016	lb PM10/000 lb of product transported	Process and stack similarity to Blackfoot Stack CHI. 90% PM removal assumed to occur in fabric filter. With fabric filter all PM emitted assumed to be PM-10.
Process B	432	0.0016	lb PM10/000 lb of product transported	Process and stack similarity to Blackfoot Stack CHI. 90% PM removal assumed to occur in fabric filter. With fabric filter all PM emitted assumed to be PM-10.
Process B	322	0.0080	lb PM10/000 lb of product transported	Process and stack similarity to Blackfoot Stack CHI. 50.0% of solid TSP emissions assumed to be PM10, based on AP-42 Table 9.9.1-2, Note g.
Process B	572	0.038	lb PM10/000 lb of product transported	AP-42, Table 9.9.1-1 (5/98) for Internal Vibrating Grain Cleaning with cyclone control selected as closest comparable process with emission factor. Per Note j of Table 9.9.1-1, PM10 assumed to be 25 % of TSP.
Plant	Heaters	0.0075	lb PM10/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion and assuming 1020 BTU/scf. All PM assumed to be PM10.
Plant	Plant Roads	3.42	lb PM10/hr	AP-42 Section 13.2 used to estimate road emissions. Emission details in Appendix B data tables. Emission factor shown is for annual average.

Table B-11. Estimated PM10 Emissions

Production Process	Stack Identification Code	Annual Emissions				
		Emission Factor	Emission Factor Units	Operating Rate	Operating Units	Annual Emissions, tpy
Boilers	Kipper Boiler	71.200	ton PM-10/yr	1	-	71.20
Plant	Woodpile	0.250	lb PM-10/ton of wood handled	56,314	lb PM-10/ton of wood handled	7.04
Boilers	Boiler 1	0.007	lb PM10/MMBTU	455,520	lb PM10/MMBTU	1.70
Boilers	Boiler 2	0.007	lb PM10/MMBTU	437,124	lb PM10/MMBTU	1.63
Process A	7020	0.010	lb PM10/000 lbs unit process throughput	357,408	lb PM10/000 lbs unit process throughput	1.82
Process A	7101	0.106	lb PM10/000 lbs unit process throughput	178,704	lb PM10/000 lbs unit process throughput	9.47
Process A	7102	0.106	lb PM10/000 lbs unit process throughput	178,704	lb PM10/000 lbs unit process throughput	9.47
Process A	7019	0.020	lb PM10/000 lbs unit process throughput	357,408	lb PM10/000 lbs unit process throughput	3.48
Process A	7001	0.046	lb PM10/000 lbs unit process throughput	44,676	lb PM10/000 lbs unit process throughput	1.03
Process A	7027	0.008	lb PM10/000 lbs unit process throughput	44,676	lb PM10/000 lbs unit process throughput	0.18
Process A	7006	0.003	lb PM10/000 lbs production process output	357,408	lb PM10/000 lbs production process output	0.54
Process B	5034	0.001	lb PM10/000 lbs production process output	148,920	lb PM10/000 lbs production process output	0.07
Process B	5037	0.076	lb PM10/000 lbs production process output	148,920	lb PM10/000 lbs production process output	5.66
Process B	4000	0.430	lb PM10/000 lbs production process output	35,040	lb PM10/000 lbs production process output	7.53
Process B	228	0.274	lb PM10/000 lbs production process output	35,040	lb PM10/000 lbs production process output	4.80
Process B	234	0.078	lb PM10/000 lbs production process output	35,040	lb PM10/000 lbs production process output	1.37
Process B	311	0.195	lb PM10/000 lbs production process output	13,140	lb PM10/000 lbs production process output	1.28
Process B	312	0.195	lb PM10/000 lbs production process output	13,140	lb PM10/000 lbs production process output	1.28
Process B	410/411	0.391	lb PM10/000 lbs production process output	13,140	lb PM10/000 lbs production process output	2.57
Process B	613/614	0.391	lb PM10/000 lbs production process output	24,528	lb PM10/000 lbs production process output	4.80
Process B	615/616	0.305	lb PM10/000 lbs production process output	24,528	lb PM10/000 lbs production process output	3.74

Table B-11. Estimated PM10 Emissions

Production Process	Stack Identification Code	Annual Emissions				
		Emission Factor	Emission Factor Units	Operating Rate	Operating Units	Annual Emissions, tpy
Process B	638	0.086	lb PM10/000 lbs production process output	24,528	lb PM10/000 lbs production process output	1.05
Process B	707	0.000	lb PM10/000 lb of unit process throughput	266,304	lb PM10/000 lb of unit process throughput	0.01
Process B	725	0.002	lb PM10/000 lb of unit process throughput	266,304	lb PM10/000 lb of unit process throughput	0.21
Process B	8	0.002	lb PM10/000 lb of product transported	266,304	lb PM10/000 lb of product transported	0.21
Process B	5001	0.008	lb PM10/000 lb of product transported	266,304	lb PM10/000 lb of product transported	1.07
Process B	5000	0.002	lb PM10/000 lb of product transported	266,304	lb PM10/000 lb of product transported	0.21
Process B	432	0.002	lb PM10/000 lb of product transported	266,304	lb PM10/000 lb of product transported	0.21
Process B	322	0.008	lb PM10/000 lb of product transported	99	lb PM10/000 lb of product transported	0.00
Process B	572	0.038	lb PM10/000 lb of product transported	13,315	lb PM10/000 lb of product transported	0.25
Plant	Heaters	0.0075	lb PM10/MMBTU	134,904	lb PM10/MMBTU	0.50
Plant	Plant Roads	3.416	lb PM10/hr	0	lb PM10/hr	0.00

Table B-12. Volatile Organic Carbon Emission Factors

Stack Identification Code	Annual Emissions		
	Emission Factor	Units	Basis for Factor
Kipper Boiler	0.049	lb VOC/000 lbs steam	Because VOC emissions are greater with wood-firing than with coal firing, emissions are based on 100% firing with wood fuel. Wood fuel emission factor is from 1994 Source Emission Evaluation Report, adjusted for increase in boiler efficiency due to installation of economizer.
Woodpile	0.530	lb VOC/ton of wood	From measurements made at wood chip piles by Axelsson et. al, 1992. Measurements of terpene emissions from wood chip piles using Fourier transform infrared spectroscpoy, Nordic Pulp and Paper Research Journal. (Emission factor in lb/ton of wood is based on VOC emission factor of 0.0095 lb/m^2-day. Estimated maximum footprint of woodpile is 8600 m^2, leading to estimated emissions of 3.41 lb/hr. Boiler max fuel usage at 90 MMBTU/hr heat input and 7,000 BTU/lb of wood is 6.43 tons wood/hr, yielding an emission factor of 0.53 lb VOC/ton of wood.)
Boiler 1	0.005	lb VOC/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled natural gas combustion, and assuming 1020 Btu/scf.
Boiler 2	0.005	lb VOC/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled natural gas combustion, and assuming 1020 Btu/scf.
7101	0.005	lb VOC/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled natural gas combustion, and assuming 1020 Btu/scf.
7102	0.005	lb VOC/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled natural gas combustion, and assuming 1020 Btu/scf.
7019	0.005	lb VOC/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled natural gas combustion, and assuming 1020 Btu/scf.
228	0.005	lb VOC/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled natural gas combustion, and assuming 1020 Btu/scf.
234	0.005	lb VOC/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled natural gas combustion, and assuming 1020 Btu/scf.
Heaters	0.005	lb VOC/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled natural gas combustion, and assuming 1020 Btu/scf.

Table B-13. Estimated Volatile Organic Carbon Emissions

Production Process	Stack Identification Code	Annual Emissions				
		Emission Factor	Emission Factor Units	Operating Rate	Operating Units	Annual Emissions, tpy
Boilers	Kipper Boiler	0.0490	lb VOC/000 lbs steam	525,600	000 lbs steam	12.9
Plant	Woodpile	0.5300	lb VOC/ton of wood	56,314	ton of wood	14.9
Boilers	Boiler 1	0.0054	lb VOC/MMBTU	455,520	MMBTU	1.2
Boilers	Boiler 2	0.0054	lb VOC/MMBTU	437,124	MMBTU	1.2
Process A	7101	0.0054	lb VOC/MMBTU	56,940	MMBTU	0.2
Process A	7102	0.0054	lb VOC/MMBTU	56,940	MMBTU	0.2
Process A	7019	0.0054	lb VOC/MMBTU	57,816	MMBTU	0.2
Process B	228	0.0054	lb VOC/MMBTU	84,622	MMBTU	0.2
Process B	234	0.0054	lb VOC/MMBTU	56,414	MMBTU	0.2
Plant	Heaters	0.0054	lb VOC/MMBTU	134,904	MMBTU	0.4

Table B-14. Lead Emission Factors

Production Process	Stack Identification Code	Emission Factor	Emission Factor Units	Basis for Factor
Boilers	Kipper Boiler	0.000066	lb Lead/000 lbs steam	Based on 100% firing with wood fuel. AP-42, Table 1.6-4 (9/03 update) Converted to steam rate assuming 7000 BTU/lb of fuel and 1,385 Btu heat input/lb of steam.
Boilers	Boiler 1	4.9E-07	lbs Pb/ MM Btu	Based on AP-42 emission factor of 0.0005 lbs Pb/MMscf of fuel combusted and 1020 BTU/scf natural gas heat value
Boilers	Boiler 2	4.9E-07	lbs Pb/ MM Btu	Based on AP-42 emission factor of 0.0005 lbs Pb/MMscf of fuel combusted.
Process A	7101	4.9E-07	lbs Pb/ MM Btu	Based on AP-42 emission factor of 0.0005 lbs Pb/MMscf of fuel combusted.
Process A	7102	4.9E-07	lbs Pb/ MM Btu	Based on AP-42 emission factor of 0.0005 lbs Pb/MMscf of fuel combusted.
Process A	7019	4.9E-07	lbs Pb/ MM Btu	Based on AP-42 emission factor of 0.0005 lbs Pb/MMscf of fuel combusted.
Process B	228	4.9E-07	lbs Pb/ MM Btu	Based on AP-42 emission factor of 0.0005 lbs Pb/MMscf of fuel combusted.
Process B	234	4.9E-07	lbs Pb/ MM Btu	Based on AP-42 emission factor of 0.0005 lbs Pb/MMscf of fuel combusted.
Plant	Heaters	4.9E-07	lbs Pb/ MM Btu	Based on AP-42 emission factor of 0.0005 lbs Pb/MMscf of fuel combusted.

Table B-15. Estimated Lead Emissions

Production Process	Stack Identification Code	Emission Factor	Emission Factor Units	Annual Operating Factor	Annual Operating Units	Annual Emissions, tpy
Boilers	Kipper Boiler	6.65E-05	lb Lead/000 lbs steam	569,400	000 lbs steam	1.89E-02
Boilers	Boiler 1	4.90E-07	lbs Pb/ MM Btu	455,520	MM Btu	1.12E-04
Boilers	Boiler 2	4.90E-07	lbs Pb/ MM Btu	437,124	MM Btu	1.07E-04
Process A	7101	4.90E-07	lbs Pb/ MM Btu	56,940	MM Btu	1.40E-05
Process A	7102	4.90E-07	lbs Pb/ MM Btu	56,940	MM Btu	1.40E-05
Process A	7019	4.90E-07	lbs Pb/ MM Btu	57,816	MM Btu	1.42E-05
Process B	228	4.90E-07	lbs Pb/ MM Btu	84,622	MM Btu	2.07E-05
Process B	234	4.90E-07	lbs Pb/ MM Btu	56,414	MM Btu	1.38E-05
Plant	Heaters	4.90E-07	lbs Pb/ MM Btu	134,904	MM Btu	3.31E-05

Table B-16 Greenhouse Gas (GHG) Emission Factors

Stack Identification Code	Annual Emissions		
	Emission Factor	Units	Basis for Factor
Kipper Boiler	286.4	lb GHG/lbs steam	Because GHG emissions are greater with wood-firing than with coal firing, emissions are based on 100% firing with wood fuel. Wood and coal GHG emission factors are the sum of CO2, CH4, and N2O emission factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C..
Boiler 1	117	lb GHG/MMBTU	GHG emission factor is the sum of CO2, CH4, and N2O emision factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C.
Boiler 2	117	lb GHG/MMBTU	GHG emission factor is the sum of CO2, CH4, and N2O emision factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C.
7101	117	lb GHG/MMBTU	GHG emission factor is the sum of CO2, CH4, and N2O emision factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C.
7102	117	lb GHG/MMBTU	GHG emission factor is the sum of CO2, CH4, and N2O emision factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C.
7019	117	lb GHG/MMBTU	GHG emission factor is the sum of CO2, CH4, and N2O emision factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C.
228	117	lb GHG/MMBTU	GHG emission factor is the sum of CO2, CH4, and N2O emision factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C.
234	117	lb GHG/MMBTU	GHG emission factor is the sum of CO2, CH4, and N2O emision factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C.
Heaters	117	lb GHG/MMBTU	GHG emission factor is the sum of CO2, CH4, and N2O emision factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C.

Table B-17. Estimated Greenhouse Gas (GHG) Emissions

Boilers	Kipper Boiler	286.4	lb GHG/lbs steam	525,600	lbs steam	75,277
Boilers	Boiler 1	116.9	lb GHG/MMBTU	455,520	MMBTU	26,623
Boilers	Boiler 2	116.9	lb GHG/MMBTU	437,124	MMBTU	25,548
Process A	7101	116.9	lb GHG/MMBTU	56,940	MMBTU	3,328
Process A	7102	116.9	lb GHG/MMBTU	56,940	MMBTU	3,328
Process A	7019	116.9	lb GHG/MMBTU	57,816	MMBTU	3,379
Process B	228	116.9	lb GHG/MMBTU	84,622	MMBTU	4,946
Process B	234	116.9	lb GHG/MMBTU	56,414	MMBTU	3,297
Plant	Heaters	116.9	lb GHG/MMBTU	134,904	MMBTU	7,885

Table B-18. CO2e Emission Factors

Production Process	Stack Identification Code	Annual Emissions		
		Emission Factor	Units	Basis for Factor
Boilers	Kipper Boiler	292.4	lb CO2e/lbs steam	Because CO2e emissions are greater with wood-firing than with coal firing, emissions are based on 100% firing with wood fuel. Wood and coal CO2e emission factors are the sum of CO2, CH4, and N2O emisssion factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C, weighted by the Global warming factors listed in Table A-1 of 40 CFR 98.
Boilers	Boiler 1	117	lb CO2e/MMBTU	CO2e emission factor is the sum of CO2, CH4, and N2O emisssion factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C, weighted by the global warming factors listed in Table A-1 of 40 CFR 98.
Boilers	Boiler 2	117	lb CO2e/MMBTU	CO2e emission factor is the sum of CO2, CH4, and N2O emisssion factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C, weighted by the global warming factors listed in Table A-1 of 40 CFR 98.
Process A	7101	117	lb CO2e/MMBTU	CO2e emission factor is the sum of CO2, CH4, and N2O emisssion factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C, weighted by the global warming factors listed in Table A-1 of 40 CFR 98.
Process A	7102	117	lb CO2e/MMBTU	CO2e emission factor is the sum of CO2, CH4, and N2O emisssion factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C, weighted by the global warming factors listed in Table A-1 of 40 CFR 98.
Process A	7019	117	lb CO2e/MMBTU	CO2e emission factor is the sum of CO2, CH4, and N2O emisssion factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C, weighted by the global warming factors listed in Table A-1 of 40 CFR 98.
Process B	228	117	lb CO2e/MMBTU	CO2e emission factor is the sum of CO2, CH4, and N2O emisssion factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C, weighted by the global warming factors listed in Table A-1 of 40 CFR 98.
Process B	234	117	lb CO2e/MMBTU	CO2e emission factor is the sum of CO2, CH4, and N2O emisssion factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C, weighted by the global warming factors listed in Table A-1 of 40 CFR 98.
Plant	Heaters	117	lb CO2e/MMBTU	CO2e emission factor is the sum of CO2, CH4, and N2O emisssion factors from Tables C-1 and C-2 of 40 CFR 98 Subpart C, weighted by the global warming factors listed in Table A-1 of 40 CFR 98.

Table B-19. Estimated CO2e Emissions

Production Process	Stack Identification Code	Annual Emissions				
		Emission Factor	Emission Factor Units	Operating Rate	Operating Units	Annual Emissions, tpy
Boilers	Kipper Boiler	292.4	lb CO2e/lbs steam	525,600	lbs steam	76,831
Boilers	Boiler 1	117.0	lb CO2e/MMBTU	455,520	MMBTU	26,649
Boilers	Boiler 2	117.0	lb CO2e/MMBTU	437,124	MMBTU	25,573
Process A	7101	117.0	lb CO2e/MMBTU	56,940	MMBTU	3,331
Process A	7102	117.0	lb CO2e/MMBTU	56,940	MMBTU	3,331
Process A	7019	117.0	lb CO2e/MMBTU	57,816	MMBTU	3,382
Process B	228	117.0	lb CO2e/MMBTU	84,622	MMBTU	4,951
Process B	234	117.0	lb CO2e/MMBTU	56,414	MMBTU	3,300
Plant	Heaters	117.0	lb CO2e/MMBTU	134,904	MMBTU	7,892

Table B-20. Hazardous Air Pollutant Emission Factors for Natural Gas - External Combustion

Pollutant		Emission Factor lb/MMScf	Emission Factor lb/MMBtu
Lead		5.00E-04	4.90E-07
POM (sum of POM consituuents listed below)		8.82E-05	8.65E-08
2-Methylnaphthalene	2.40E-05		
3-Methylchloranthrene	1.80E-06		
7,12-Dimethylbenz(a)anthracene	1.60E-05		
Acenaphthene	1.80E-06		
Acenaphthylene	1.80E-06		
Anthracene	2.40E-06		
Benz(a)anthracene	1.80E-06		
Benzo(a)pyrene	1.20E-06		
Benzo(b)fluoranthene	1.80E-06		
Benzo(g,h,i)perylene	1.20E-06		
Benzo(k)fluoranthene	1.80E-06		
Chrysene	1.80E-06		
Dibenzo(a,h)anthracene	1.20E-06		
Fluoranthene	3.00E-06		
Fluorene	2.80E-06		
Indeno(1,2,3-cd)pyrene	1.80E-06		
Phenanathrene	1.70E-05		
Pyrene	5.00E-06		
Benzene		2.10E-03	2.06E-06
Dichlorobenzene		1.20E-03	1.18E-06
Formaldehyde		7.50E-02	7.35E-05
Hexane		1.80E+00	1.76E-03
Naphthalene		6.10E-04	5.98E-07
Toluene		3.40E-03	3.33E-06
Arsenic		2.00E-04	1.96E-07
Beryllium		1.20E-05	1.18E-08
Cadmium		1.10E-03	1.08E-06
Chromium		1.40E-03	1.37E-06
Cobalt		8.40E-05	8.24E-08
Manganese		3.80E-04	3.73E-07
Mercury		2.60E-04	2.55E-07
Nickel		2.10E-03	2.06E-06
Selenium		2.40E-05	2.35E-08
	Total HAP Emission Factor:		1.85E-03
	Largest Emisson Factor (Hexane):		1.76E-03

From AP-42, Chapter 1.4 and based on 1020 BTU/scf

Table B-21. Hazardous Air Pollutant Emission Factors for Wood Fuel - External Combustion

Pollutant		Emission Factor lb/MMBTU
Acetaldehyde		8.30E-04
Acetophenone		3.20E-09
Acrolein		4.00E-03
Benzene		4.20E-03
bis(2-Ethylhexyl)phthalate		4.70E-08
Bromomethane (methyl bromide)		1.50E-05
2-Butanone (MEK)		5.40E-06
Carbon tetrachloride		4.50E-05
Chlorine		7.90E-04
Chlorobenzene		3.30E-05
Chloroform		2.80E-05
Chloromethane (methyl chloride)		2.30E-05
1,2-Dichloroethane		2.90E-05
Dichloromethane		2.90E-04
1,2-Dichloropropane (propylene dichloride)		3.30E-05
2,4-Dinitrophenol		1.80E-07
Ethylbenzene		3.10E-05
Formaldehyde		4.40E-03
Hydrogen chloride		1.90E-02
Naphthalene		9.70E-05
4-Nitrophenol		1.10E-07
Pentachlorophenol		5.10E-08
Phenol		5.10E-05
Propionaldehyde		6.10E-05
Styrene		1.90E-03
2,3,7,8-Tetrachlorodibenzo-p-dioxins		8.60E-12
Tetrachloroethene		3.80E-05
Toluene		9.20E-04
1,1,1-Trichloroethane (methyl choloroform)		3.10E-05
Trichloroethene		3.00E-05
2,4,6-Trichlorophenol		2.20E-08
Vinyl Chloride		1.80E-05
o-Xylene		2.50E-05
Dibenzofurans - sum of compounds listed below)		1.87E-09
Heptachlorodibenzo-p-furans	2.40E-10	
Hexachlorodibenzo-p-furans	2.80E-10	
Octachlorodibenzo-p-furans	8.80E-11	
Pentachlorodibenzo-p-furans	4.20E-10	
2,3,7,8-Tetrachlorodibenzo-p-furans	9.00E-11	
Tetrachlorodibenzo-p-furans	7.50E-10	
POM (sum of consituuents listed below)		1.25E-04
Acenaphthene	9.10E-07	
Acenaphthylene	5.00E-06	
Anthracene	3.00E-06	
Benzo(a)anthracene	6.50E-08	
Benzo(a)pyrene	2.60E-06	
Benzo(b)fluoranthene	1.00E-07	
Benzo(e)pyrene	2.60E-09	
Benzo(g,h,i)perylene	9.30E-08	
Benzo(j,k)fluoranthene	1.60E-07	
Benzo(k)fluoranthene	3.60E-08	
2-Chloronaphthalene	2.40E-09	
Chrysene	3.80E-08	
Dibenzo(a,h)anthracene	9.10E-09	
Fluoranthene	1.60E-06	
Fluorene	3.40E-06	
Indeno(1,2,3,c,d)pyrene	8.70E-08	
2-Methylnaphthalene	1.60E-07	
Naphthalene	9.70E-05	
Perylene	5.20E-10	
Phenanthrene	7.00E-06	
Pyrene	3.70E-06	
Antimony		7.90E-06
Arsenic		2.20E-05
Beryllium		1.10E-06
Cadmium		4.10E-06
Chromium, total		2.10E-05

Table B-21. Hazardous Air Pollutant Emission Factors for Wood Fuel - External Combustion

Pollutant	Emission Factor lb/MMBTU
Chromium, hexavalent	3.50E-06
Cobalt	6.50E-06
Lead	4.80E-05
Manganese	1.60E-03
Mercury	3.50E-06
Nickel	3.30E-05
Selenium	2.80E-06
Largest Emisson Factor (Hydrogen chloride):	**1.90E-02**
Total HAP Emission Factor:	**3.88E-02**
Total HAP Emission Factor with 90% HCl removal in scrubber:	**2.17E-02**

From AP-42, Chapter 1.6

Table B-22. Hazardous Air Pollutant Emission Factors for Coal - External Combustion

Pollutant		Emission Factor lb/ton	Emission Factor lb/MMBTU
2,3,7,8-TCDD		1.43E-11	7.53E-13
Total PCDF		1.09E-09	5.74E-11
POM (sum of POM consituuents listed below)		2.08E-05	1.09E-06
5-Methyl chrysene	2.20E-08		
Acenaphthene	5.10E-07		
Acenaphthylene	2.50E-07		
Anthracene	2.10E-07		
Benzo(a)anthracene	8.00E-08		
Benzo(a)pyrene	3.80E-08		
Benzo(b,j,k)fluoranthene	1.10E-07		
Benzo(g,h,i)perylene	2.70E-08		
Biphenyl	1.70E-06		
Chrysene	1.00E-07		
Fluoranthene	7.10E-07		
Fluorene	9.10E-07		
Indeno(1,2,3-cd)pyrene	6.10E-08		
Naphthalene	1.30E-05		
Phenanthrene	2.70E-06		
Pyrene	3.30E-07		
Acetaldehyde		5.70E-04	3.00E-05
Acetophenone		1.50E-05	7.89E-07
Acrolein		2.90E-04	1.53E-05
Benzene		1.30E-03	6.84E-05
Benzyl chloride		7.00E-04	3.68E-05
Bis(2-ethylhexyl)phthalate (DEHP)		7.30E-05	3.84E-06
Bromoform		3.90E-05	2.05E-06
Carbon disulfide		1.30E-04	6.84E-06
2-Chloroacetophenone		7.00E-06	3.68E-07
Chlorobenzene		2.20E-05	1.16E-06
Chloroform		5.90E-05	3.11E-06
Cumene		5.30E-06	2.79E-07
Cyanide		2.50E-03	1.32E-04
2,4-Dinitrotoluene		2.80E-07	1.47E-08
Dimethyl sulfate		4.80E-05	2.53E-06
Ethyl benzene		9.40E-05	4.95E-06
Ethyl chloride		4.20E-05	2.21E-06
Ethylene dichloride		4.00E-05	2.11E-06
Ethylene dibromide		1.20E-06	6.32E-08
Formaldehyde		2.40E-04	1.26E-05
Hexane		6.70E-05	3.53E-06
Isophorone		5.80E-04	3.05E-05
Methyl bromide (bromomethance)		1.60E-04	8.42E-06
Methyl chloride		5.30E-04	2.79E-05
Methyl ethyl ketone		3.90E-04	2.05E-05
Methyl hydrazine		1.70E-04	8.95E-06
Methyl methacrylate		2.00E-05	1.05E-06
Methyl tert butyl ether		3.50E-05	1.84E-06
Methylene chloride		2.90E-04	1.53E-05
Phenol		1.60E-05	8.42E-07
Propionaldehyde		3.80E-04	2.00E-05
Tetrachloroethylene		4.30E-05	2.26E-06
Toluene		2.40E-04	1.26E-05
1,1,1-Trichloroethane (methyl chloroform)		2.00E-05	1.05E-06
Styrene		2.50E-05	1.32E-06
Xylenes		3.70E-05	1.95E-06
Vinyl acetate		7.60E-06	4.00E-07
Hydrogen chloride		1.2	6.32E-02
Hydrogen fluoride		0.15	7.89E-03
Antimony		1.80E-05	9.47E-07
Arsenic		4.10E-04	2.16E-05
Beryllium		2.10E-05	1.11E-06
Cadmium		5.10E-05	2.68E-06
Chromium		2.60E-04	1.37E-05
Cobalt		1.00E-04	5.26E-06

Table B-22. Hazardous Air Pollutant Emission Factors for Coal - External Combustion

Pollutant	Emission Factor	
	lb/ton	lb/MMBTU
Lead	4.20E-04	2.21E-05
Manganese	4.90E-04	2.58E-05
Mercury	8.30E-05	4.37E-06
Nickel	2.80E-04	1.47E-05
Selenium	1.30E-03	6.84E-05
Largest Emisson Factor (Hydrogen chloride):	**1.20E+00**	**6.32E-02**
Total HAP Emission Factor:	**1.36E+00**	**7.17E-02**
Total HAP Emission Factor with 90% HCl removal in scrubber:	**2.83E-01**	**1.49E-02**

From AP-42, Chapter 1.1, assuming 9500 BTU/lb

Table B-23. Plant-wide Potential HAP Emissions

Combustion Activity	HAP Emissions, lb/MMBTU	Kipper Wood Fired				Kipper Coal:Wood Cofired			
		Fuel Usage*			Potential HAP	Fuel Usage*			Potential HAP
		MMBTU/hr	Hours/yr	MMBTU/yr	Emissions, tpy	MMBTU/hr	Hours/yr	MMBTU/yr	Emissions, tpy
Solid Fuels									
Kipper Boiler - wood	0.0217**	90.0	8760	788,401	8.56	40.0	8760	350,400	3.80
Kipper Boiler - coal	0.0149**					40.0	8760	350,400	2.61
Natural Gas									
Boiler 1	0.00185	52	8760	455,520	0.42	52	8760	455,520	0.42
Boiler 2	0.00185	49.9	8760	437,124	0.40	49.9	8760	437,124	0.40
7101	0.00185	6.5	8760	56,940	0.05	6.5	8760	56,940	0.05
7102	0.00185	6.5	8760	56,940	0.05	6.5	8760	56,940	0.05
7019	0.00185	6.6	8760	57,816	0.05	6.6	8760	57,816	0.05
228	0.00185	9.66	8760	84,622	0.08	9.66	8760	84,622	0.08
234	0.00185	6.44	8760	56,414	0.05	6.44	8760	56,414	0.05
Heaters	0.00185	30.8	4380	134,904	0.12	30.8	4380	134,904	0.12
				Total HAP PTE:	9.80			*Total HAP PTE:*	7.65

* Constraints on fuel combustion resulting from plant-wide CO and GHG emissions limits are not considered in these calculations.
** Assumes 90% HCl removal efficiency in scrubber

APPENDIX C

APPLICABLE RULES

Table C-1 lists air pollution control rules that have been identified as applicable to operations at the Rexburg Facility of Basic American Foods, along with the citation to the location of the rule and the location of the permitting document containing a regulatory analysis of the content of the rule as applied to the Rexburg Facility.

Applicable requirements that are conditions established as part of issuance of a permit to construct approval are not included in this table. Analysis of those requirements is can be found in the Statements of Basis for the Permits to Construct.

TABLE C-1
APPLICABLE RULES

Rule	Citation	Regulatory Analysis Location (see key below table for full document title)
GHG Tailoring Rule	40 CFR 51, 52, 70, and 71	2012b
NSPS	40 CFR 60, Subpart Dc	2002; 2008a; 2008b; 2012a; 2012b
NESHAPs/MACTs	40 CFR 61 and 63	2002; 2008a; 2012b
CAM Rule	40 CFR 64	2008a
Accidental Chemical Release	40 CFR 68	2002
Class I and Class II Refrigerants	40 CFR 82, Subpart F	2002
GHG Reporting	40 CFR 98	2012b
Non-hazardous Secondary Materials	40 CFR 241	2012b
Excess Emissions Records	IDAPA 58.01.01.130-136	2002
Source Testing	IDAPA 58.01.01.157	2002
Toxic Substances	IDAPA 58.01.01.161	2008b
Open Burning	IDAPA 58.01.01.600-623	2002
Visible Emissions	IDAPA 58.01.01.625	2002
Fugitive Dust Control	IDAPA 58.01.01.650-651	2002
Particulate Matter Emissions	IDAPA 58.01.01.675 through 681	2002

TABLE C-1
APPLICABLE RULES

Rule	Citation	Regulatory Analysis Location (see key below table for full document title)
Particulate Matter Emissions	IDAPA 58.01.01.700-703	2002
Sulfur Content of Fuels	IDAPA 58.01.01.725-729	No analysis, but included in Facility-wide conditions in 2012 Tier I permit amendment.
Management of Odors	IDAPA 58.01.01.775-776	2002
Construction Permitting	IDAPA 58.01.01.200-228	2008b; 2012a

Key for Regulatory Analysis Location:

- 2002 *"Technical Basis for Tier I Operating Permit"*, December 6, 2002. Stephen Coe, Permit Writer. Permit Number 065-00008.
- 2008a "Air Quality Permitting Statement of Basis, Tier I Operating Permit No. T1-060513, Basic American Foods – Rexburg, Facility ID 065-00008, Final", Zach Klotovich, Permit Writer
- 2008b *"Air Quality Permitting Statement of Basis, Tier II Operating Permit and Permit to Construct No. T2-00515, Basic American Foods – Rexburg, Facility ID 065-00008, Final"*, June 5, 2008, Zach Klotovich, Permit Writer
- 2012a *"Statement of Basis, Permit to Construct No. P-2011.0132,Project ID 60943, Basic American Foods – Rexburg, Rexburg, Idaho, Facility ID 065-00008, Final"*, June 1, 2012, Darrin Pampaian, P.E., Permit Writer
- 2012b *"Application for Renewal of Tier I Air Operating Permit, Rexburg Facility of Basic American Foods"*, October 2012.

APPENDIX D

FIINAPPLICABLE RULES AND REQUIREMENTS

The air pollution rules and requirements listed below are judged inapplicable or not environmentally significant for the reasons listed. These requirements are listed in this permit application so that these determinations will be included within the Permit Shield.

Citation	Title	Basis
IDAPA 58.01.01.000 - 004	Legal Authority, Title and Scope; Written Interpretations, Administrative Appeals; Catchlines	Rule does not apply to stationary sources.
IDAPA 58.01.01.005 - 011	Definitions	Rule is not an operating requirement
IDAPA 58.01.01.106	Abbreviations	Rule is not an operating requirement
IDAPA 58.01.01.107	Incorporations by Reference	Rule is not an operating requirement
IDAPA 58.01.01.128	Compliance Requirements by Department	Rule is not an operating requirement
IDAPA 58.01.01.140-149	Variances	Rule is not an operating requirement
IDAPA 58.01.01.162	Modifying Physical Conditions	Rule does not apply to stationary sources.
IDAPA 58.01.01.163	Source Density	Rule does not apply to stationary sources.
IDAPA 58.01.01.204	Permit Requirements for New Major Facilities or Major Modifications in Non-Attainment Areas	Facility not in this geographic area
IDAPA 58.01.01.321-325	Tier I Operating Permit Content	Rule is not an operating requirement
IDAPA 58.01.01.335	General Tier I Operating Permits and Authorizations to Operate	Facility is not a source regulated by this rule
IDAPA 58.01.01.336	Tier I Permits for Portable Sources	Facility is not a source regulated by this rule
IDAPA 58.01.01.360-369	Standard Processing of Tier I Permit Applications	Rule is not an operating requirement
IDAPA 58.01.01.525-538	Registration and Registration Fees	Rule is an administrative requirement only and is not environmentally significant
IDAPA 58.01.01.550-560	Air Pollution Emergency Rule	Rule is not an operating requirement
IDAPA 58.01.01.578	Designation of Attainment, Unclassifiable, and Nonattainment Areas	Rule does not apply to stationary sources.
IDAPA 58.01.01.579-581	Prevention of Significant Deterioration rules	Facility is not a source regulated by this rule
IDAPA 58.01.01.214	Demonstration of Preconstruction Compliance for New and Reconstructed Major Sources of Hazardous Air Pollutants.	Facility is not a source regulated by this rule
IDAPA 58.01.01.224-228	Permit to Construct Application Fees	Rule is an administrative requirement only and is not environmentally significant
IDAPA 58.01.01.387-397	Tier I Registration Fees	Rule is an administrative requirement only and is not environmentally significant
IDAPA 58.01.01.470 (3-7-95)	Permit Application Fees for Tier II Permits (not in IDAPA 58.01 but in Approved SIP)	Rule is an administrative requirement only and is not environmentally significant

Citation	Title	Basis
IDAPA 58.01.01.563-574	Transportation Conformity	Facility is not a source regulated by this rule
IDAPA 58.01.01.582	Interim Conformity for Northern Ada County	Facility not in this geographic area
IDAPA 58.01.01.609-613, 615-616	Training Fires, Industrial Flares, Residential Solid Waste Disposal Fires, Landfill Disposal Site Fires, Orchard Fires, Dangerous Material Fires, Infectious Waste Burning	Facility is not a source regulated by this rule
IDAPA 58.01.01.626	General Restrictions on Emissions from Wigwam Burners	Facility is not a source regulated by this rule
IDAPA 58.01.01.750-751	Control of Fluoride Emissions	Pollutant not emitted by facility.
IDAPA 58.01.01.785-787	Control of Incinerators	Facility is not a source regulated by this rule
IDAPA 58.01.01.805-808	Control of Hot-mix Asphalt Plants	Facility is not a source regulated by this rule
IDAPA 58.01.01.815-826	Control of Kraft Pulping Mills	Facility is not a source regulated by this rule
IDAPA 58.01.01.835-839	Control of Rendering Plants	Facility is not a source regulated by this rule
IDAPA 58.01.01.845-848	Control of Sulfur Oxide Emissions from Sulfuric Acid Plants	Facility is not a source regulated by this rule
IDAPA 58.01.01.855-858	Combined Lead and Zinc Smelters	Facility is not a source regulated by this rule
IDAPA 58.01.01.859-860	Municipal Solid Waste Landfills	Facility is not a source regulated by this rule
IDAPA 58.01.01.861-862	Hospital/Medical/Infectious Waste Incinerators	Facility is not a source regulated by this rule
IDAPA 58.01.01.790-799	Nonmetallic Mineral Processing	Facility is not a source regulated by this rule
IDAPA 58.01.01.800-802	Permit by Rule Fees	Facility is not a source regulated by this rule
40 CFR Part 49	Tribal Clean Air Authority	Facility is not a source regulated by this rule
40 CFR Part 51	Requirements for preparation, adoption, and submittal of implementation plans	Rule does not apply to stationary sources.
40 CFR Part 55	Outer continental shelf air regulations	Facility not in this geographic area
40 CFR Part 56	Regional Consistency	Rule does not apply to stationary sources.
40 CFR Part 57	Nonferrous Smelter Rules	Facility is not a source regulated by this rule
40 CFR Part 59	National volatile organic compound emission standards for consumer and commercial products	Facility is not a source regulated by this rule
40 CFR Part 60, except Subparts A, Dc and appendices	Standards of performance for new stationary sources	Facility is not a source regulated by this rule
40 CFR 60.47c	Emission Monitoring for Particulate Matter	Facility has NSPS Subpart Dc Alternative to COMS approved by US EPA pursuant to 40 CFR 60.13(i).

Citation	Title	Basis
40 CFR Part 61, except subpart A, M, and appendices	National emission standards for hazardous air pollutants	Facility is not a source regulated by this rule
40 CFR Part 62	Approval and promulgation of State plans for designated facilities and pollutants	Facility is not a source regulated by this rule
40 CFR Part 63 except Subpart JJJJJ	National emission standards for hazardous air pollutants for source categories	Facility is not a source regulated by this rule
40 CFR Part 67	EPA approval of State noncompliance penalty program	Rule does not apply to stationary sources.
40 CFR Part 71	Federal operating permit programs	Facility is not a source regulated by this rule
40 CFR Part 72	Permits regulation	Facility is not a source regulated by this rule
40 CFR Part 73	Sulfur dioxide allowance system	Facility is not a source regulated by this rule
40 CFR Part 74	Sulfur dioxide opt-ins	Facility is not a source regulated by this rule
40 CFR Part 75	Continuous emission monitoring	Facility is not a source regulated by this rule
40 CFR Part 76	Acid rain nitrogen oxides emission reduction program	Facility is not a source regulated by this rule
40 CFR Part 77	Excess emissions	Facility is not a source regulated by this rule
40 CFR Part 78	Appeal procedures for Acid Rain Program	Facility is not a source regulated by this rule
40 CFR Part 79	Registration of fuels and fuel additives	Facility is not a source regulated by this rule
40 CFR Part 80	Regulation of fuels and fuel additives	Facility is not a source regulated by this rule
40 CFR Part 81	Designation of areas for air quality planning purposes	Rule does not apply to stationary sources.
40 CFR Part 82, except Subpart F	Stratospheric Ozone Protection	Facility is not a source regulated by this rule
40 CFR Part 85	Control of air pollution from mobile sources	Rule does not apply to stationary sources.
40 CFR Part 86	Control of emissions from new and in-use highway vehicles and engines	Rule does not apply to stationary sources.
40 CFR Part 87	Control of air pollution from aircraft and aircraft engines	Rule does not apply to stationary sources.
40 CFR Part 88	Clean-fuel vehicles	Rule does not apply to stationary sources.
40 CFR Part 89	Control of emissions from new and in-use nonroad compression-ignition engines	Rule does not apply to stationary sources.
40 CFR Part 90	Control of emissions from nonroad spark-ignition engines at or below 19 kilowatts	Rule does not apply to stationary sources.
40 CFR Part 91	Control of emissions from marine spark-ignition engines	Rule does not apply to stationary sources.
40 CFR Part 92	Control of emissions from locomotives and locomotive engines	Rule does not apply to stationary sources.
40 CFR Part 93	Determining conformity of Federal actions to State or Federal implementation plans	Rule does not apply to stationary sources.

Citation	Title	Basis
40 CFR Part 94	Control of air pollution from marine compression-ignition engines	Rule does not apply to stationary sources.
40 CFR Part 96	NOX Budget Trading Program for State Implementation Plans	Facility is not a source regulated by this rule
40 CFR Part 97	Federal NOX Budget Trading Program	Facility is not a source regulated by this rule

APPENDIX E

DEQ FORM FRA AND REGULATORY ANALYSIS FOR NEW POTENTIALLY APPLICABLE RULES

REGULATORY ANALYSIS FOR BOILER MACT

Title 40: Protection of Environment
PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (CONTINUED)

Subpart JJJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

§ 63.11193 Am I subject to this subpart?

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

The Rexburg Facility meets criteria to be subject to this subpart because it is an area source of HAP and has boilers that are not elsewhere exempted from the rule.

§ 63.11194 What is the affected source of this subpart?

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

...

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

The Kipper Boiler at the Rexburg Facility is included in this definition of an "affected source".

...

(e) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or part 71 as a result of this subpart. You may, however, be required to obtain a title V permit due to another reason or reasons. *See* 40 CFR 70.3(a) and (b) or 71.3(a) and (b). Notwithstanding the exemption from title V permitting for area sources under this subpart, you must continue to comply with the provisions of this subpart.

The Rexburg Facility is required to obtain a Part 70 permit for other reasons.

§ 63.11195 Are any boilers not subject to this subpart?

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

...

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

Boilers 1 and 2 at the Rexburg Facility are not subject to Subpart JJJJJ because they are gas-fired boilers as defined in Subpart JJJJJ.

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§ 63.11196 What are my compliance dates?

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

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

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

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

The Kipper Boiler is subject to the provisions of paragraphs (a)(1) and (a)(3), the tune-up and the energy assessment requirements. The Kipper Boiler is subject to the provisions of paragraph (a)(2) when co-firing coal with biomass. Note, however, that the March 21, 2012 compliance date for the boiler tune-up work practice standard is currently not being enforced by US EPA in accordance with EPA's July 18, 2012 "No Action Assurance" Memorandum[1].

...

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

§ 63.11200 What are the subcategories of boilers?

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

The Kipper Boiler is included in the coal and biomass subcategories.

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§ 63.11201 What standards must I meet?

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

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[1] Memorandum July 18, 2012 to Gina McCarty, EPA Assistant Administrator, Office of Air and Radiation, from Cynthia Giles, Assistant Administrator, Office of Enforcement and Compliance Assurance. http://www.epa.gov/ttn/atw/boiler/20120718memo.pdf

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

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

(d) These standards apply at all times.

Tables 1 and 3 are applicable to the Kipper Boiler when the Kipper Boiler is co-firing with coal. Table 2 is applicable to the Kipper Boiler at all times.

General Compliance Requirements

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

(a) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

The Kipper Boiler is subject to this general duty clause.

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

These provisions are potentially applicable to the Kipper Boiler when the Kipper Boiler co-fires coal.

(c) If you demonstrate compliance with any applicable emission limit through performance stack testing and subsequent compliance with operating limits (including the use of continuous parameter monitoring system), with a CEMS, or with a COMS, you must develop a site-specific monitoring plan according to the requirements in paragraphs (c)(1) through (3) of this section for the use of any CEMS, COMS, or continuous parameter monitoring system. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under § 63.8(f).
(1) For each continuous monitoring system required in this section (including CEMS, COMS, or continuous parameter monitoring system), you must develop, and submit to the delegated authority for approval upon request, a site-specific monitoring plan that addresses paragraphs (c)(1)(i) through (vi) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation of your CMS. This requirement to develop and submit a site specific monitoring plan does not apply to affected sources with existing monitoring plans that apply to CEMS and COMS prepared under appendix B to part 60 of this chapter and which meet the requirements of § 63.11224.
(i) Installation of the continuous monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);
(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and
(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).
(iv) Ongoing operation and maintenance procedures in accordance with the general requirements of § 63.8(c)(1)(ii), (c)(3), and (c)(4)(ii);
(v) Ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d); and

(vi) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 63.10(c) (as applicable in Table 8 to this subpart), (e)(1), and (e)(2)(i).
(2) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.
(3) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

These provisions are potentially applicable to the Kipper Boiler when the Kipper Boiler co-fires coal.

...

Initial Compliance Requirements

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

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

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

The provisions of paragraphs (a) and (b) are applicable to the Kipper Boiler when the Kipper Boiler co-fires coal.

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

The provisions of paragraph (c) are applicable to the Kipper Boiler. Note, however, that the March 21, 2012 compliance date for the boiler tune-up work practice standard is currently not being enforced by US EPA in accordance with EPA's July 18, 2012 "No Action Assurance" Memorandum[2].

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§63.11211 How do I demonstrate initial compliance with the emission limits?

(a) For affected boilers that demonstrate compliance with any of the emission limits of this subpart through performance (stack) testing, your initial compliance requirements include conducting performance tests according to § 63.11212 and Table 4 to this subpart, conducting a fuel analysis for each type of fuel burned in your boiler according to § 63.11213 and Table 5 to this subpart, establishing operating limits according to § 63.11222, Table 6 to this subpart and paragraph (b) of this section, as applicable, and conducting continuous monitoring system (CMS) performance evaluations according to § 63.11224. For affected boilers that burn a single type of fuel, you are exempted from the compliance requirements of conducting a fuel analysis for each type of fuel burned in your boiler. For purposes of this subpart, boilers that use a supplemental fuel only for startup, unit shutdown, and transient flame stability purposes still qualify as affected boilers that burn a single type of fuel, and the supplemental fuel is not subject to the fuel analysis requirements under § 63.11213 and Table 5 to this subpart.

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[2] Memorandum July 18, 2012 to Gina McCarty, EPA Assistant Administrator, Office of Air and Radiation, from Cynthia Giles, Assistant Administrator, Office of Enforcement and Compliance Assurance. http://www.epa.gov/ttn/atw/boiler/20120718memo.pdf

(b) You must establish parameter operating limits according to paragraphs (b)(1) through (4) of this section.
(1) For a wet scrubber, you must establish the minimum liquid flowrate and pressure drop as defined in § 63.11237, as your operating limits during the three-run performance stack test. If you use a wet scrubber and you conduct separate performance stack tests for particulate matter and mercury emissions, you must establish one set of minimum scrubber liquid flowrate and pressure drop operating limits. If you conduct multiple performance stack tests, you must set the minimum liquid flowrate and pressure drop operating limits at the highest minimum values established during the performance stack tests.

...

The provisions of paragraphs (a) and (b)(1) are applicable to the Kipper Boiler when the Kipper Boiler co-fires coal. Paragraphs (b)(2) – (b)(4) are not applicable to the Kipper Boiler.

(c) If you elect to demonstrate compliance with an applicable mercury emission limit through fuel analysis, you must conduct fuel analyses according to § 63.11213 and Table 5 to this subpart and follow the procedures in paragraphs (c)(1) through (3) of this section.
(1) If you burn more than one fuel type, you must determine the fuel type, or mixture, you could burn in your boiler that would result in the maximum emission rates of mercury.
(2) You must determine the 90th percentile confidence level fuel mercury concentration of the composite samples analyzed for each fuel type using Equation 1 of this section

$$P_{90} = \text{mean} + (SD * t) \quad \text{(Eq. 1)}$$

Where:
P_{90} = 90th percentile confidence level mercury concentration, in pounds per million Btu.
mean = Arithmetic average of the fuel mercury concentration in the fuel samples analyzed according to § 63.11213, in units of pounds per million Btu.
SD = Standard deviation of the mercury concentration in the fuel samples analyzed according to § 63.11213, in units of pounds per million Btu.
t = t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.
(3) To demonstrate compliance with the applicable mercury emission limit, the emission rate that you calculate for your boiler using Equation 1 of this section must be less than the applicable mercury emission limit.

The provisions of paragraphs (c) are potentially applicable to the Kipper Boiler when the Kipper Boiler co-fires coal.

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§ 63.11212 What stack tests and procedures must I use for the performance tests?

(a) You must conduct all performance tests according to § 63.7(c), (d), (f), and (h). You must also develop a site specific test plan according to the requirements in § 63.7(c).

(b) You must conduct each stack test according to the requirements in Table 4 to this subpart.

(c) You must conduct performance stack tests at the representative operating load conditions while burning the type of fuel or mixture of fuels that have the highest emissions potential for each regulated pollutant, and you must demonstrate initial compliance and establish your operating limits based on these performance stack tests. For subcategories with more than one emission limit, these requirements could result in the need to conduct more than one performance stack test. Following each performance stack test and until the next performance stack test, you must comply with the operating limit for operating load conditions specified in Table 3 to this subpart.

(d) You must conduct a minimum of three separate test runs for each performance stack test required in this section, as specified in § 63.7(e)(3) and in accordance with the provisions in Table 4 to this subpart.

(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 of appendix A–7 to part 60 of this chapter to convert the measured particulate

matter concentrations and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates.

These provisions are applicable for any stack testing conducted of the Kipper Boiler conducted to meet the requirements of Subpart JJJJJ. These provisions are not applicable to performance testing of the Kipper Boiler for purposes not required under Subpart JJJJJ.

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§ 63.11213 What fuel analyses and procedures must I use for the performance tests?

(a) You must conduct fuel analyses according to the procedures in paragraphs (b) and (c) of this section and Table 5 to this subpart, as applicable. You are not required to conduct fuel analyses for fuels used for only startup, unit shutdown, and transient flame stability purposes. You are required to conduct fuel analyses only for fuels and units that are subject to emission limits for mercury in Table 1 of this subpart.

(b) At a minimum, you must obtain three composite fuel samples for each fuel type according to the procedures in Table 5 to this subpart. Each composite sample must consist of a minimum of three samples collected at approximately equal intervals during a test run period.

(c) Determine the concentration of mercury in the fuel in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 5 to this subpart.

These provisions are applicable for any fuel analysis of coal conducted to meet the requirements of this Subpart.

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

...

(b) If you own or operate an existing or new biomass-fired boiler or an existing or new oil-fired boiler, you must conduct a performance tune-up according to § 63.11223(b) and you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted a tune-up of the boiler.

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

The Kipper Boiler is subject to the provisions of paragraphs (b) and (c).

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

The provisions of paragraph (d) are applicable to the Kipper Boiler when the Kipper Boiler co-fires coal.

Continuous Compliance Requirements

§ 63.11220 When must I conduct subsequent performance tests?

(a) If your boiler has a heat input capacity of 10 million Btu per hour or greater, you must conduct all applicable performance (stack) tests according to § 63.11212 on an triennial basis, unless you follow the requirements listed in paragraphs (b) through (d) of this section. Triennial performance tests must be completed no more than 37 months after the previous performance test, unless you follow the requirements listed in paragraphs (b) through (d) of this section.

(b) You can conduct performance stack tests less often for particulate matter or mercury if your performance stack tests for the pollutant for at least 3 consecutive years show that your emissions are at or below 75 percent of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In this case, you do not have to conduct a performance stack test for that pollutant for the next 2 years. You must conduct a performance stack test during the third year and no more than 37 months after the previous performance stack test.

(c) If your boiler continues to meet the emission limit for particulate matter or mercury, you may choose to conduct performance stack tests for the pollutant every third year if your emissions are at or below 75 percent of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions, but each such performance stack test must be conducted no more than 37 months after the previous performance test.

(d) If you have an applicable CO emission limit, you must conduct triennial performance tests for CO according to § 63.11212. Each triennial performance test must be conducted between no more than 37 months after the previous performance test.

(e) If you demonstrate compliance with the mercury emission limit based on fuel analysis, you must conduct a fuel analysis according to § 63.11213 for each type of fuel burned monthly. If you plan to burn a new type of fuel or fuel mixture, you must conduct a fuel analysis before burning the new type of fuel or mixture in your boiler. You must recalculate the mercury emission rate using Equation 1 of § 63.11211. The recalculated mercury emission rate must be less than the applicable emission limit.

These provisions are potentially applicable to the Kipper Boiler when the Kipper Boiler co-fires coal.

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§ 63.11221 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section.

(b) You must operate the monitoring system and collect data at all required intervals at all times the affected source is operating except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods (see section 63.8(c)(7) of this part), and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments. 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 effect 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.

(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 calculations used to report emissions or operating levels. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

(d) Except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-ofcontrol periods, and required monitoring system quality assurance or quality control

activities including, as applicable, calibration checks and required zero and span adjustments, failure to collect required data is a deviation of the monitoring requirements.

These provisions are potentially applicable to the Kipper Boiler when the Kipper Boiler co-fires coal.

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§ 63.11222 How do I demonstrate continuous compliance with the emission limits?

(a) You must demonstrate continuous compliance with each emission limit and operating limit in Tables 1 and 3 to this subpart that applies to you according to the methods specified in Table 7 to this subpart and to paragraphs (a)(1) through (4) of this section.

(1) Following the date on which the initial compliance demonstration is completed or is required to be completed under §§ 63.7 and 63.11196, whichever date comes first, you must continuously monitor the operating parameters. Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in paragraph (a) of this section constitutes a deviation from your operating limits established under this subpart, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests.

(2) If you have an applicable mercury or PM emission limit, you must keep records of the type and amount of all fuels burned in each boiler during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would result in lower emissions of mercury than the applicable emission limit (if you demonstrate compliance through fuel analysis), or result in lower fuel input of mercury than the maximum values calculated during the last performance stack test (if you demonstrate compliance through performance stack testing).

(3) If you have an applicable mercury emission limit and you plan to burn a new type of fuel, you must determine the mercury concentration for any new fuel type in units of pounds per million Btu, using the procedures in Equation 1 of § 63.11211 based on supplier data or your own fuel analysis, and meet the requirements in paragraphs (a)(3)(i) or (ii) of this section.

(i) The recalculated mercury emission rate must be less than the applicable emission limit.

(ii) If the mercury concentration is higher than mercury fuel input 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 § 63.11212 to demonstrate that the mercury emissions do not exceed the emission limit.

(4) If your unit is controlled with a fabric filter, and you demonstrate continuous compliance using a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alarm and operate and maintain the fabric filter system such that the alarm does not sound more than 5 percent of the operating time during a 6-month period. You must also keep records of the date, time, and duration of each alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of the operating time during each 6-month period that the alarm sounds. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm is counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time is counted as the actual amount of time taken to initiate corrective action.

(b) You must report each instance in which you did not meet each emission limit and operating limit in Tables 1 and 3 to this subpart that apply to you. These instances are deviations from the emission limits in this subpart. These deviations must be reported according to the requirements in § 63.11225.

These provisions are potentially applicable to the Kipper Boiler when the Kipper Boiler co-fires coal.

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

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

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

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

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

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

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

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

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

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

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

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

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

The Kipper Boiler is subject to the provisions of paragraphs (a) and (b).

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

The provisions of paragraph (c) are potentially applicable to the Kipper Boiler when the Kipper Boiler co-fires coal.

§ 63.11224 What are my monitoring, installation, operation, and maintenance requirements?

(a) If your boiler is subject to a carbon monoxide emission limit in Table 1 to this subpart, you must install, operate, and maintain a continuous oxygen monitor according to the procedures in paragraphs (a)(1) through (6) of this section by the compliance date specified in §63.11196. The oxygen level shall be monitored at the outlet of the boiler.
(1) Each monitor must be installed, operated, and maintained according to the applicable procedures under Performance Specification 3 at 40 CFR part 60, appendix B, and according to the site-specific monitoring plan developed according to paragraph (c) of this section.
(2) You must conduct a performance evaluation of each CEMS according to the requirements in § 63.8(e) and according to Performance Specification 3 at 40 CFR part 60, appendix B.
(3) Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
(4) The CEMS data must be reduced as specified in § 63.8(g)(2).
(5) You must calculate and record the 12-hour block average concentrations.
(6) For purposes of calculating data averages, you must use all the data collected during all periods in assessing compliance, excluding data collected during periods when the monitoring system malfunctions or is out of control, during associated repairs, and during required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments). Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system malfunctions or is out of control and data are not available for a required calculation constitutes a deviation from the monitoring requirements. Periods when data are unavailable because of required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments) do not constitute monitoring deviations.

(b) If you are using a control device to comply with the emission limits specified in Table 1 to this subpart, you must maintain each operating limit in Table 3 to this subpart that applies to your boiler as specified in Table 7 to this subpart. If you use a control device not covered in Table 3 to this subpart, or you wish to establish and monitor an alternative operating limit and alternative monitoring parameters, you must apply to the United States Environmental Protection Agency (EPA) Administrator for approval of alternative monitoring under § 63.8(f).

(c) If you demonstrate compliance with any applicable emission limit through stack testing and subsequent compliance with operating limits, you must develop a site-specific monitoring plan according to the requirements in paragraphs (c)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under § 63.8(f).
(1) For each continuous monitoring system (CMS) required in this section, you must develop, and submit to the EPA Administrator for approval upon request, a site-specific monitoring plan that addresses paragraphs (b)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan (if requested) at least 60 days before your initial performance evaluation of your CMS.
(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device).
(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems.
(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).
(2) In your site-specific monitoring plan, you must also address paragraphs (b)(2)(i) through (iii) of this section.
(i) Ongoing operation and maintenance procedures in accordance with the general requirements of § 63.8(c)(1), (3), and (4)(ii).
(ii) Ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d).
(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 63.10(c), (e)(1), and (e)(2)(i).
(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.
(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

(d) If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system according to the procedures in paragraphs (d)(1) through (5) of this section.
(1) The continuous parameter monitoring system must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.
(2) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation at all times that the unit is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
(3) For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out of control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. Any 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.
(4) Determine the 12-hour block average of all recorded readings, except as provided in paragraph (d)(3) of this section.
(5) Record the results of each inspection, calibration, and validation check.

(e) If you have an applicable opacity operating limit under this rule, you must install, operate, certify and maintain each continuous opacity monitoring system (COMS) according to the procedures in paragraphs (e)(1) through (7) of this section by the compliance date specified in § 63.11196.
...

(f) If you use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate the bag leak detection system as specified in paragraphs (f)(1) through (8) of this section.
...

The provisions of paragraphs (a) - (d) are applicable to the Kipper Boiler when the Kipper Boiler co-fires coal. Paragraphs (e) and (f) are not applicable.

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§ 63.11225 What are my notification, reporting, and recordkeeping requirements?

(a) You must submit the notifications specified in paragraphs (a)(1) through (a)(5) of this section to the delegated authority.

(1) You must submit all of the notifications in §§63.7(b); 63.8(e) and (f); 63.9(b) through (e); and 63.9(g) and (h) that apply to you by the dates specified in those sections.

(2) As specified in §63.9(b)(2), you must submit the Initial Notification no later than 120 calendar days after May 20, 2011 or within 120 days after the source becomes subject to the standard.

Under this rule, the Kipper Boiler is potentially subject to the notification, reporting, and recordkeeping provisions of 63.7(b), 63.8(e) and (f), 63.9(b) - (e), (g), and (h). Note that the provisions of 63.9(e) and (g) are not applicable unless the Kipper Boiler co-fires coal.

(3) If you are required to conduct a performance stack test you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance stack test is scheduled to begin.

This provision is applicable to the Kipper Boiler when performance testing of the Kipper Boiler is conducted due to coal co-firing. This provision is not applicable to performance testing of the Kipper Boiler for purposes not required under Subpart JJJJJ.

(4) You must submit the Notification of Compliance Status in accordance with §63.9(h) no later than 120 days after the applicable compliance date specified in §63.11196 unless you must conduct a performance stack test. If you must conduct a performance stack test, you must submit the Notification of Compliance Status within 60 days of completing the performance stack test. In addition to the information required in §63.9(h)(2), your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
(i) "This facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler."
(ii) "This facility has had an energy assessment performed according to §63.11214(c)."
(iii) For an owner or operator that installs bag leak detection systems: "This facility has prepared a bag leak detection system monitoring plan in accordance with § 63.11224 and will operate each bag leak detection system according to the plan."
(iv) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."

The Kipper Boiler is subject to the provisions of subparagraph (4) except for subparagraph (4)(iii).

(b) You must prepare, by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified in paragraphs (b)(1) through (4) of this section. You must submit the report by March 15 if you had any instance described by paragraph (b)(3) of this section. For boilers that are subject only to a requirement to conduct a biennial tune-up according to §63.11223(a) and not subject to emission limits or operating limits, you may prepare only a biennial compliance report as specified in paragraphs (b)(1) through (4) of this section, instead of a semi-annual compliance report.

(1) Company name and address.

(2) Statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart.

(3) If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

(4) The total fuel use by each affected boiler subject to an emission limit, for each calendar month within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by you or EPA through a petition process to be a non-waste under §241.3(c), whether the fuel(s) were processed from discarded non-hazardous secondary materials within the meaning of §241.3, and the total fuel usage amount with units of measure.

The Kipper Boiler is subject to the compliance certification requirements of paragraph (b).

(c) You must maintain the records specified in paragraphs (c)(1) through (5) of this section.

(1) As required in §63.10(b)(2)(xiv), you must keep a copy of each notification and report that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.

(2) You must keep records to document conformance with the work practices, emission reduction measures, and management practices required by §63.11214 as specified in paragraphs (c)(2)(i) and (ii) of this section.

(i) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.

(ii) Records documenting the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel, including whether the fuel has received a non-waste determination by you or EPA, and the total fuel usage amount with units of measure. If you combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to §241.3(b)(1), you must keep a record which documents how the secondary material meets each of the

legitimacy criteria. If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to §241.3(b)(4), you must keep records as to how the operations that produced the fuel satisfies the definition of processing in §241.2. If the fuel received a non-waste determination pursuant to the petition process submitted under §241.3(c), you must keep a record that documents how the fuel satisfies the requirements of the petition process.

(3) For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation that were done to demonstrate compliance with the mercury emission limits. Supporting documentation should include results of any fuel analyses. You can use the results from one fuel analysis for multiple boilers provided they are all burning the same fuel type.

(4) Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

The Kipper Boiler is subject to the recordkeeping requirements of paragraph (c)(1) – (c)(5).

(6) You must keep the records of all inspection and monitoring data required by §§ 63.11221 and 63.11222, and the information identified in paragraphs (c)(6)(i) through (vi) of this section for each required inspection or monitoring.
(i) The date, place, and time of the monitoring event.
(ii) Person conducting the monitoring.
(iii) Technique or method used.
(iv) Operating conditions during the activity.
(v) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation.
(vi) Maintenance or corrective action taken (if applicable).

The Kipper is subject to the recordkeeping requirements of paragraph (c)(6) when co-firing coal.

(7) If you use a bag leak detection system, you must keep the records specified in paragraphs (c)(7)(i) through (iii) of this section.
(i) Records of the bag leak detection system output.
(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings.
(iii) The date and time of all bag leak detection system alarms, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed.

The Kipper Boiler is not subject to the recordkeeping requirements of paragraph (c)(7).

(d) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each recorded action. You must keep each record onsite for at least 2 years after the date of each recorded action according to §63.10(b)(1). You may keep the records off site for the remaining 3 years.

The Kipper Boiler is subject to the recordkeeping and retention requirements of paragraph (d).

(e) As of January 1, 2012 and within 60 days after the date of completing each performance test, as defined in §63.2, conducted to demonstrate compliance with this subpart, you must submit relative accuracy test audit (i.e., reference method) data and performance test (i.e., compliance test) data, except opacity data, electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) (*see http://www.epa.gov/ttn/chief/ert/ert tool.html/*) or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.

The Kipper Boiler is subject to the performance test reporting requirements of paragraph (e) if performance testing of the Kipper Boiler is conducted due to coal co-firing. This provision is not applicable to performance testing of the Kipper Boiler for purposes not required under Subpart JJJJJ.

(f) If you intend to commence or recommence combustion of solid waste, you must provide 30 days prior notice of the date upon which you will commence or recommence combustion of solid waste. The notification must identify:
(1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that will commence burning solid waste, and the date of the notice.
(2) The currently applicable subcategory under this subpart.
(3) The date on which you became subject to the currently applicable emission limits.
(4) The date upon which you will commence combusting solid waste.

Paragraph (f) would only apply to the Kipper Boiler if the Kipper Boiler commenced combustion of solid waste. BAF has no plan or intention to combust solid waste in the Kipper Boiler.

(g) If you intend to switch fuels, and this fuel switch may result in the applicability of a different subcategory or a switch out of subpart JJJJJJ due to a switch to 100 percent natural gas, you must provide 30 days prior notice of the date upon which you will switch fuels. The notification must identify:
(1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that will switch fuels, and the date of the notice.
(2) The currently applicable subcategory under this subpart.
(3) The date on which you became subject to the currently applicable standards.
(4) The date upon which you will commence the fuel switch.

Paragraph (g) would only apply to the Kipper Boiler if the Kipper Boiler switched fuels. BAF has no plan or intention to switch fuels fired in the Kipper Boiler.

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

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

(a) To establish the affirmative defense in any action to enforce such a limit, you must timely meet the notification requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:
(1) The excess emissions:
(i) Were caused by a sudden, infrequent, and unavoidable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner, and
(ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and
(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and
(iv) Were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
(2) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and
(3) The frequency, amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions; and
(4) If the excess emissions resulted from a bypass of control equipment or a process, then the bypass was unavoidable to

prevent loss of life, personal injury, or severe property damage; and
(5) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health; and
(6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and
(7) All of the actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs; and
(8) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions; and
(9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

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

The Kipper Boiler is subject to this provision when co-firing coal. When coal is not being co-fired this provision is not applicable because the Kipper Boiler only has a numerical emission limit when combusting coal.

Other Requirements and Information

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

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

Portions of Table 8 are potentially applicable, as referenced in Subpart JJJJJ

Table 1 to Subpart JJJJJJ of Part 63—Emission Limits

As stated in §63.11201, you must comply with the following applicable emission limits:

If your boiler is in this subcategory	For the following pollutants	You must achieve less than or equal to the following emission limits, except during periods of startup and shutdown. . .
1. New coal-fired boiler with heat input capacity of 30 million Btu per hour or greater.	a. Particulate Matter	0.03 lb per MMBtu of heat input.
	b. Mercury	0.0000048 lb per MMBtu of heat input.
	c. Carbon Monoxide	400 ppm by volume on a dry basis corrected to 3 percent oxygen.

2. New coal-fired boiler with heat input capacity of between 10 and 30 million Btu per hour.	a. Particulate Matter b. Mercury c. Carbon Monoxide	0.42 lb per MMBtu of heat input. 0.0000048 lb per MMBtu of heat input. 400 ppm by volume on a dry basis corrected to 3 percent oxygen.
3. New biomass-fired boiler with heat input capacity of 30 million Btu per hour or greater.	a. Particulate Matter	0.03 lb per MMBtu of heat input.
4. New biomass fired boiler with heat input capacity of between 10 and 30 million Btu per hour.	a. Particulate Matter	0.07 lb per MMBtu of heat input.
5. New oil-fired boiler with heat input capacity of 10 million Btu per hour or greater.	a. Particulate Matter	0.03 lb per MMBtu of heat input.
6. Existing coal (units with heat input capacity of 10 million Btu per hour or greater).	a. Mercury b. Carbon Monoxide	0.0000048 lb per MMBtu of heat input. 400 ppm by volume on a dry basis corrected to 3 percent oxygen.

Category 6 of Table 1 is applicable to the Kipper Boiler when the Kipper Boiler is co-firing coal.

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

As stated in §63.11201, you must comply with the following applicable work practice standards, emission reduction measures, and management practices:

If your boiler is in this subcategory. . .	You must meet the following. . .
1. Existing or new coal, new biomass, and new oil (units with heat input capacity of 10 million Btu per hour or greater).	Minimize the boiler's startup and shutdown periods following the manufacturer's recommended procedures. If manufacturer's recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available.
2. Existing or new coal (units with heat input capacity of less than 10 million Btu per hour).	Conduct a tune-up of the boiler biennially as specified in § 63.11223.
3. Existing or new biomass or oil	Conduct a tune-up of the boiler biennially as specified in § 63.11223.

If your boiler is in this subcategory. . .	You must meet the following. . .
4. Existing coal, biomass, or oil (units with heat input capacity of 10 million Btu per hour and greater)	Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table satisfies the energy assessment requirement. The energy assessment must include: (1) A visual inspection of the boiler system, (2) An evaluation of operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints, (3) Inventory of major systems consuming energy from affected boiler(s), (4) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage, (5) A list of major energy conservation measures, (6) A list of the energy savings potential of the energy conservation measures identified, (7) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

Subcategories 3 and 4 apply to the Kipper Boiler. Subcategory 1 applies to the Kipper Boiler during coal co-firing. Subcategory 2 is inapplicable because the heat input of the Kipper Boiler exceeds 10 MMBTU/hr.

Table 3 to Subpart JJJJJJ of Part 63—Operating Limits for Boilers With Emission Limits

As stated in §63.11201, you must comply with the applicable operating limits:

If you demonstrate compliance with applicable emission limits using . .	You must meet these operating limits. . .
...	...
3. Wet PM scrubber control	Maintain the pressure drop at or above the lowest 1-hour average pressure drop across the wet scrubber and the liquid flow-rate at or above the lowest 1-hour average liquid flow rate measured during the most recent performance test demonstrating compliance with the PM emission limitation.
...	...

The Table 3 operating limits for wet PM scrubber control are applicable to the Kipper Boiler when the Kipper Boiler is co-firing coal. When the Kipper Boiler is not co-firing coal Subpart JJJJJ does not require use of an emissions control device.

Table 4 to Subpart JJJJJJ of Part 63—Performance (Stack) Testing Requirements

As stated in §63.11212, you must comply with the following requirements for performance (stack) test for affected sources:

To conduct a performance test for the following pollutant.	You must.	Using. .
1. Particulate Matter	a. Select sampling ports location and the number of traverse points.	Method 1 in appendix A–1 to part 60 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2F, or 2G in appendix A–2 to part 60 of this chapter.
	c. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B in appendix A–2 to part 60 of this chapter, or ASTM D6522–00 (Reapproved 2005), or ANSI/ASME PTC 19.10–1981.
	d. Measure the moisture content of the stack gas.	Method 4 in appendix A–3 to part 60 of this chapter.
	e. Measure the particulate matter emission concentration.	Method 5 or 17 (positive pressure fabric filters must use Method 5D) in appendix A–3 and A–6 to part 60 of this chapter and a minimum 1 dscm of sample volume per run.
	f. Convert emissions concentration to lb/ MMBtu emission rates.	Method 19 F-factor methodology in appendix A–7 to part 60 of this chapter.
2. Mercury	a. Select sampling ports location and the number of traverse points.	Method 1 in appendix A–1 to part 60 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2F, or 2G in appendix A–2 to part 60 of this chapter.
	c. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B in appendix A–2 to part 60 of this chapter, or ASTM D6522–00 (Reapproved 2005) ,a or ANSI/ASME PTC 19.10–1981. a
	d. Measure the moisture content of the stack gas.	Method 4 in appendix A–3 to part 60 of this chapter.
	e. Measure the mercury emission concentration.	Method 29, 30A, or 30B in appendix A–8 to part 60 of this chapter or Method 101A in appendix B to part 61 of this chapter or ASTM Method D6784–02.a Collect a minimum 2 dscm of sample volume with Method 29 of 101A per run. Use a minimum run time of 2 hours with Method 30A.
	f. Convert emissions concentration to lb/ MMBtu emission rates.	Method 19 F-factor methodology in appendix A–7 to part 60 of this chapter.
3. Carbon Monoxide	a. Select the sampling ports location and the number of traverse points.	Method 1 in appendix A–1 to part 60 of this chapter.
	b. Determine oxygen and carbon dioxide concentrations of the stack gas.	Method 3A or 3B in appendix A–2 to part 60 of this chapter, or ASTM D6522–00 (Reapproved 2005),a or ANSI/ASME PTC 19.10–1981.a
	c. Measure the moisture content of the stack gas.	Method 4 in appendix A–3 to part 60 of this chapter.
	d. Measure the carbon monoxide emission concentration.	Method 10, 10A, or 10B in appendix A–4 to part 60 of this chapter or ASTM D6522–00 (Reapproved 2005) a and a minimum 1 hour sampling time per run.

The Table 4 requirements for performance testing are applicable to the Kipper Boiler when the Kipper Boiler is co-firing coal. When the Kipper Boiler is not co-firing coal Subpart JJJJJ does not require performance testing.

Table 5 to Subpart JJJJJJ of Part 63—Fuel Analysis Requirements

As stated in §63.11213, you must comply with the following requirements for fuel analysis testing for affected sources:

To conduct a fuel analysis for the following pollutant.	You must.	Using. .
1. Mercury	a. Collect fuel samples	Procedure in § 63.11213(b) or ASTM D2234/D2234M a (for coal) or ASTM D6323 a (for biomass) or equivalent.
	b. Compose fuel samples	Procedure in § 63.11213(b) or equivalent.
	c. Prepare composited fuel samples	EPA SW–846–3050B a (for solid samples) or EPA SW–846–3020A a (for liquid samples) or ASTM D2013/D2013M a (for coal) or ASTM D5198 a (for biomass) or equivalent.
	d. Determine heat content of the fuel type.	ASTM D5865a (for coal) or ASTM E711 a (for biomass) or equivalent.
	e. Determine moisture content of the fuel type	ASTM D3173a or ASTM E871a or equivalent.
	f. Measure mercury concentration in fuel sample	ASTM D6722a (for coal) or EPA SW–846–7471B a (for solid samples) or EPA SW–846–7470A a (for liquid samples) or equivalent.
	g. Convert concentrations into units of lb/MMBtu of heat content	-

Table 5 is applicable to the Kipper Boiler if fuel analysis of coal is conducted to demonstrate compliance with the mercury emissions limit.

Table 6 to Subpart JJJJJJ of Part 63—Establishing Operating Limits

As stated in §63.11211, you must comply with the following requirements for 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. Particulate matter or mercury.	a. Wet scrubber operating parameters.	i. Establish a sitespecific minimum pressure drop and minimum flow rate operating limit according to § 63.11211(b).	(1) Data from the pressure drop and liquid flow rate monitors and the particulate matter or mercury performance stack test.	(a) You must collect pressure drop and liquid flow-rate data every 15 minutes during the entire period of the performance stack tests; (b) Determine the average pressure drop and liquid flow-rate for each individual test run in the three-run performance stack test by computing the average of all the 15-minute readings taken during each test run.
...	...	...	...	...
3. Carbon monoxide	a. Oxygen	i. Establish a unitspecific limit for minimum oxygen level according to § 63.11211(b).	(1) Data from the oxygen monitor specified in § 63.11224(a).	(a) You must collect oxygen data every 15 minutes during the entire period of the performance stack tests; (b) Determine the average oxygen concentration for each individual test run in the three-run performance stack test by computing the average of all the 15-minute readings taken during each test run.

The Table 6 requirements for operating limits for wet scrubbers for particulate matter control and for oxygen content for carbon monoxide control are applicable to the Kipper Boiler when the Kipper Boiler is co-firing coal. When the Kipper Boiler is not co-firing coal Subpart JJJJJ does not require operating limits for the scrubber. Portions of Table 6 not copied into this review are not applicable because they pertain to control devices that are not used on the Kipper Boiler.

Table 7 to Subpart JJJJJJ of Part 63—Demonstrating Continuous Compliance

As stated in §63.11222, you must show continuous compliance with the emission limitations for affected sources according to the following:

If you must meet the following operating limits.	You must demonstrate continuous compliance by.
...	...
3. Wet scrubber pressure drop and liquid flow-rate.	a. Collecting the pressure drop and liquid flow rate monitoring system data according to §§ 63.11224 and 63.11221; and b. Reducing the data to 12-hour block averages; and c. Maintaining the 12-hour average pressure drop and liquid flow-rate at or above the operating limits established during the performance test according to § 63.1140.
...	...
7. Oxygen content	a. Continuously monitor the oxygen content in the combustion exhaust according to § 63.11224. b. Maintain the 12-hour average oxygen content at or above the operating limit established during the most recent carbon monoxide performance test.

The Table 7 requirements for demonstrating continuous compliance for wet scrubbers for particulate matter control and for oxygen content for carbon monoxide control are applicable to the Kipper Boiler when the Kipper Boiler is co-firing coal. When the Kipper Boiler is not co-firing coal Subpart JJJJJ does not require operating limits for the scrubber. Portions of Table 7 not copied into this review are not applicable because they pertain to operating limits for control devices that are not used on the Kipper Boiler.

REGULATORY ANALYSIS FOR BOILER MACT

Title 40: Protection of Environment
PART 241—SOLID WASTES USED AS FUELS OR INGREDIENTS IN COMBUSTION UNITS

Subpart B—Identification of Non-Hazardous Secondary Materials That Are Solid Wastes When Used as Fuels or Ingredients in Combustion Units

§ 241.3 Standards and procedures for identification of non-hazardous secondary materials that are solid wastes when used as fuels or ingredients in combustion units.

(a) Except as provided in paragraph (b) of this section, non-hazardous secondary materials that are combusted are solid wastes, unless a petition is submitted to, and a determination granted by, the Regional Administrator pursuant to paragraph (c) of this section. The criteria to be addressed in the petition, as well as the process for making the non-waste determination, are specified in paragraph (c) of this section.

(b) The following non-hazardous secondary materials are not solid wastes when combusted:
(1) Non-hazardous secondary materials used as a fuel in a combustion unit that remain within the control of the generator and that meet the legitimacy criteria specified in paragraph d)(1) of this section.
(2) The following non-hazardous secondary materials that have not been discarded and meet the legitimacy criteria specified in paragraph (d)(1) of this section when used in a combustion unit (by the generator or outside the control of the generator):
(i) Scrap tires used in a combustion unit that are removed from vehicles and managed under the oversight of established tire collection programs.
(ii) Resinated wood used in a combustion unit.
(3) Non-hazardous secondary materials used as an ingredient in a combustion unit that meet the legitimacy criteria specified in paragraph (d)(2) of this section.
(4) Fuel or ingredient products that are used in a combustion unit, and are produced from the processing of discarded non-hazardous secondary materials and that meet the legitimacy criteria specified in paragraph (d)(1) of this section, with respect to fuels, and paragraph (d)(2) of this section, with respect to ingredients. The legitimacy criteria apply after the non-hazardous secondary material is processed to produce a fuel or ingredient product. Until the discarded non-hazardous secondary material is processed to produce a non-waste fuel or ingredient, the discarded non-hazardous secondary material is considered a solid waste and would be subject to all appropriate federal, state, and local requirements.

40 CFR 241.3 established criteria for determining when non-hazardous secondary materials (NHSM) are not solid waste when combusted. Compliance with these rules, which are referenced in several locations in 40 CFR 63 Subpart JJJJJ, is part of the Subpart JJJJJ applicability criteria for the Kipper Boiler. 40 CFR 241.3(b) is self-implementing and does not require either submittal of information to regulatory agencies or approval of NHSM determinations by agencies. However, 40 CFR 63.11225(c)(2) identifies records that must be maintained pertaining to compliance with 40 CFR 241.3.

(c) The Regional Administrator may grant a non-waste determination that a non-hazardous secondary material that is used as a fuel, which is not managed within the control of the generator, is not discarded and is not a solid waste when combusted. The criteria and process for making such nonwaste determinations includes the following:
(1) Submittal of an application to the Regional Administrator for the EPA Region where the facility combusting the non-hazardous secondary material is located for a determination that the non-hazardous secondary material, even though it has been transferred to a third party, has not been discarded and is indistinguishable in all relevant aspects from a product fuel. The determination will be based on whether the non-hazardous secondary material that has been discarded, is a legitimate fuel as specified in paragraph (d)(1) of this section and on the following criteria:
(i) Whether market participants treat the non-hazardous secondary material as a product rather than as a solid waste;
(ii) Whether the chemical and physical identity of the non-hazardous secondary material is comparable to commercial fuels;

(iii) Whether the non-hazardous secondary material will be used in a reasonable time frame given the state of the market;
(iv) Whether the constituents in the non-hazardous secondary material are released to the air, water or land from the point of generation to the point just prior to combustion of the secondary material at levels comparable to what would otherwise be released from traditional fuels; and
(v) Other relevant factors. (2) The Regional Administrator will evaluate the application pursuant to the following procedures:
(i) The applicant must submit an application for the non-waste determination addressing the legitimacy criteria in paragraph (d)(1) of this section and the relevant criteria in paragraphs c)(1)(i) through (v) of this section. In addition, the applicant must also show that the non-hazardous secondary material has not been discarded in the first instance.
(ii) The Regional Administrator will evaluate the application and issue a draft notice tentatively granting or denying the application. Notification of this tentative decision will be published in a newspaper advertisement or radio broadcast in the locality where the facility combusting the non-hazardous secondary material is located, and be made available on EPA's Web site.
(iii) The Regional Administrator will accept public comments on the tentative decision for at least 30 days, and may also hold a public hearing upon request or at his discretion. The Regional Administrator will issue a final decision after receipt of comments and after the hearing (if any).
(iv) If a change occurs that affects how a non-hazardous secondary material meets the relevant criteria contained in this paragraph after a formal non-waste determination has been granted, the applicant must re-apply to the Regional Administrator for a formal determination that the non-hazardous secondary material continues to meet the relevant criteria and, thus is not a solid waste.

40 CFR 241.3(c) is applicable only if BAF requests that the EPA Regional Administrator make a non-waste determination for a fuel source. At this time BAF does not intend to apply for such a determination.

(d) Legitimacy criteria for non-hazardous secondary materials.
(1) Legitimacy criteria for non-hazardous secondary materials used as a fuel in combustion units include the following:
(i) The non-hazardous secondary material must be managed as a valuable commodity based on the following factors:
(A) The storage of the non-hazardous secondary material prior to use must not exceed reasonable time frames;
(B) Where there is an analogous fuel, the non-hazardous secondary material must be managed in a manner consistent with the analogous fuel or otherwise be adequately contained to prevent releases to the environment;
(C) If there is no analogous fuel, the non-hazardous secondary material must be adequately contained so as to prevent releases to the environment;
(ii) The non-hazardous secondary material must have a meaningful heating value and be used as a fuel in a combustion unit that recovers energy.
(iii) The non-hazardous secondary material must contain contaminants at levels comparable in concentration to or lower than those in traditional fuels which the combustion unit is designed to burn. Such comparison is to be based on a direct comparison of the contaminant levels in the non-hazardous secondary material to the traditional fuel itself.
(2) Legitimacy criteria for non-hazardous secondary materials used as an ingredient in combustion units include the following:
(i) The non-hazardous secondary material must be managed as a valuable commodity based on the following factors:
(A) The storage of the non-hazardous secondary material prior to use must not exceed reasonable time frames;
(B) Where there is an analogous ingredient, the non-hazardous secondary material must be managed in a manner consistent with the analogous ingredient or otherwise be adequately contained to prevent releases to the environment;
(C) If there is no analogous ingredient, the non-hazardous secondary material must be adequately contained to prevent releases to the environment;
(ii) The non-hazardous secondary material must provide a useful contribution to the production or manufacturing process. The non-hazardous secondary material provides a useful contribution if it contributes a valuable ingredient to the product or intermediate or is an effective substitute for a commercial product.
(iii) The non-hazardous secondary material must be used to produce a valuable product or intermediate. The product or intermediate is valuable if:
(A) The non-hazardous secondary material is sold to a third party, or
(B) The non-hazardous secondary material is used as an effective substitute for a commercial product or as an ingredient or intermediate in an industrial process.
(iv) The non-hazardous secondary material must result in products that contain contaminants at levels that are comparable in concentration to or lower than those found in traditional products that are manufactured without the non-hazardous secondary material.

APPENDIX F

COMPLIANCE CERTIFICATIONS AND DEMONSTRATION METHODOLOGIES

The following table presents compliance information for each identified applicable requirement that limits emissions either directly via a numeric emission limit or indirectly via an operating requirement or required work practice standard. The information presented includes:

- A citation to the requirement
- A description of the requirement
- A certifications of current compliance status
- The methods used to establish current compliance status
- The methods proposed to be used to demonstrate compliance during the permit term
- The proposed frequency at which compliance determinations will be made during the permit term.

Information is included only for requirements that specifically limit or control emissions from a source or group of sources. Monitoring and recordkeeping requirements are not included in this discussion as these would be embodied in the compliance determination methodologies for the associated emissions limits or work standards.

The statement of current compliance is based on compliance status as of the date of certification of this application. Any issues of apparent violation either associated with BAF's compliance monitoring under the current Tier I permit or noted by DEQ during facility inspections have been resolved by BAF as of the date of this submittal.

COMPLIANCE CERTIFICATIONS AND CURRENT AND PROPOSED COMPLIANCE DETERMINATION METHODS

DESCRIPTION OF REQUIREMENT			COMPLIANCE DETERMINATION		
CITATION	REQUIREMENT	CURRENTLY IN COMPLIANCE?	CURRENT	PROPOSED FOR PERMIT TERM	PROPOSED FREQUENCY OF DETERMINATION
PLANTWIDE AND GENERAL EMISSIONS LIMITS AND CONTROLS					
Permit No. P-2011.0132, Condition 8.1	The CO emissions from this facility shall not exceed 249 tons per year from aggregated emissions sources, calculated as a rolling 12-calendar month total.	Yes	Rolling 12-month calculations of plant emissions maintained per Permit No. P-2011.0132, Condition 8.3 and 8.4	Rolling 12-month calculations of plant emissions maintained per Permit No. P-2011.0132, Condition 8.3 and 8.4	Monthly
Permit No. P-2011.0132, Condition 8.2	The Carbon Dioxide Equivalent (CO_2e) emissions from this facility shall not exceed 99,000 tons per year from aggregated emissions sources, calculated as a rolling 12-calendar month total.	Yes	Rolling 12-month calculations of plant emissions maintained per Permit No. P-2011.0132, Condition 8.5 and 8.6	Rolling 12-month calculations of plant emissions maintained per Permit No. P-2011.0132, Condition 8.5 and 8.6	Monthly
IDAPA 58.01.01.130-136	Comply with the procedures and requirements of IDAPA 58.01.01.130–136 for excess emissions.	Yes	Reporting to DEQ and records from facility excess emissions log book	Reporting to DEQ and records from facility excess emissions log book	Monthly
IDAPA 58.01.01.157	If a source test is performed to satisfy a performance test requirement or a compliance test requirement imposed by state or federal regulation, rule, permit, order or consent decree, then the test methods and procedures shall be conducted in accordance with the requirements of Section 157.	Yes	Review of records of source testing conducted.	Review of records of source testing conducted.	Annually
IDAPA 58.01.01.603	No person shall allow, suffer, cause or permit any open burning operation unless it is a category of open burning set forth in IDAPA 58.01.01,Sections 600 through 623 and the materials burned do not include any of the materials listed in IDAPA 58.01.01.603.01.a.	Yes	Quarterly inspections of plant area for evidence of open burning activities	Quarterly inspections of plant area for evidence of open burning activities	Quarterly
IDAPA 58.01.01.625	A person shall not discharge any air pollutant into the atmosphere from any point of emission for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period which is greater than twenty percent (20%) opacity as determined by this section. The provisions of this section shall not apply when the presence of uncombined water, nitrogen oxides and/or chlorine gas are the only reason(s) for the failure of the emission to comply with the requirements of this rule.	Yes	Quarterly one-minute observation of each affected emissions point, or source, using EPA Method 22 (in 40 CFR 60 Appendix A) to aid in detecting process upsets.	Quarterly one-minute observation of each affected emissions point, or source, using EPA Method 22 (in 40 CFR 60 Appendix A) to aid in detecting process upsets.	Quarterly
IDAPA 58.01.01.651	All reasonable precautions shall be taken to prevent particulate matter from becoming airborne.	Yes	Quarterly one-minute observation of each affected emissions point, or source, using EPA Method 22 (in 40 CFR 60 Appendix A) to aid in detecting process upsets.	Quarterly one-minute observation of each affected emissions point, or source, using EPA Method 22 (in 40 CFR 60 Appendix A) to aid in detecting process upsets.	Annually

COMPLIANCE CERTIFICATIONS AND CURRENT AND PROPOSED COMPLIANCE DETERMINATION METHODS

DESCRIPTION OF REQUIREMENT			COMPLIANCE DETERMINATION		
CITATION	REQUIREMENT	CURRENTLY IN COMPLIANCE?	CURRENT	PROPOSED FOR PERMIT TERM	PROPOSED FREQUENCY OF DETERMINATION
IDAPA 58.01.01.702	The permittee shall not discharge to the atmosphere from any source operating prior to October 1, 1979, PM in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour. a. If PW is less than 17,000 lb/hr, $E = 0.045(PW)^{0.6}$ b. If PW is equal to or greater than 17,000 lb/hr, $E = 1.12(PW)^{0.27}$	Yes	Estimates of emissions from emissions units using emission factors approved by DEQ. Results of quarterly one-minute observation of each affected emissions point, or source, using EPA Method 22 (in 40 CFR 60 Appendix A) to aid in detecting process upsets.	Estimates of emissions from emissions units using emission factors approved by DEQ. Results of quarterly one-minute observation of each affected emissions point, or source, using EPA Method 22 (in 40 CFR 60 Appendix A) to aid in detecting process upsets.	Monthly
IDAPA 58.01.01.725-729	• After January, 1974, no person shall sell, distribute, use or make available for use, any residual fuel oil containing more than one and three-fourths percent (1.75%) sulfur by weight • No person shall sell, distribute, use or make available for use, any distillate fuel oil containing more than the following percentages of sulfur: – ASTM Grade 1 fuel oil - 0.3 percent by weight) 02. – ASTM Grade 2 fuel oil - 0.5 percent by weight. • No person shall sell, distribute, use or make available for use, any coal containing greater than one percent (1.0%) sulfur by weight.	Yes	• Environmental staff participation in project planning • Annual review of facility air emissions compliance status	• Environmental staff participation in project planning • Annual review of facility air emissions compliance status	Annually
IDAPA 58.01.01.776	No person shall allow, suffer, cause or permit the emission of odorous gases, liquids or solids into the atmosphere in such quantities as to cause air pollution.	Yes	Quarterly inspections of plant area for evidence of odor conditions. Maintenance of odor compliant logs and follow-up actions taken in response to odor complaints.	Quarterly inspections of plant area for evidence of odor conditions. Maintenance of odor compliant logs and follow-up actions taken in response to odor complaints.	Annually
40 CFR 60, Subpart A	Comply with the applicable requirements of 40 CFR 60, Subpart A—"General Provisions"—in accordance with 40 CFR 60.1.	Yes	• Environmental staff participation in project planning • Annual review of facility air emissions compliance status	• Environmental staff participation in project planning • Annual review of facility air emissions compliance status	Annually
40 CFR 61 Subpart M	Comply with rules pertaining to the National Emission Standard for Asbestos	Yes	Review of records of BAF RACM management program.	Review of records of BAF RACM management program.	Annually
40 CFR 68	Comply with rules for prevention of accidental releases of chemicals	Yes	Review of records maintained in accordance with provisions of 40 CFR 68	Review of records maintained in accordance with provisions of 40 CFR 68	Annually

COMPLIANCE CERTIFICATIONS AND CURRENT AND PROPOSED COMPLIANCE DETERMINATION METHODS

DESCRIPTION OF REQUIREMENT			COMPLIANCE DETERMINATION		
CITATION	REQUIREMENT	CURRENTLY IN COMPLIANCE?	CURRENT	PROPOSED FOR PERMIT TERM	PROPOSED FREQUENCY OF DETERMINATION
40 CFR 82	Comply with rules for recycling and emissions reductions of refrigerants	Yes	Review of records maintained in accordance with provisions of 40 CFR 82	Review of records maintained in accordance with provisions of 40 CFR 82	Annually
KIPPER BOILER					
Permit No. P-2011.0132, Condition 3.2	Emissions of particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM_{10}) from the Kipper boiler stack shall not exceed 16.3 pounds per hour (24-hour average) and 71.2 tons per any consecutive 12-month period.	Yes	• Rolling 12-month calculations of plant emissions • Boiler operating logs of steam production and fuel usage • Results of performance tests for particulates • Maintenance and operation of a wet scrubber system in accordance with provisions of Permit No. P-2011.0132 • Annual boiler tuning	• Rolling 12-month calculations of plant emissions • Boiler operating logs of steam production and fuel usage • Results of performance tests for particulates • Maintenance and operation of a wet scrubber system in accordance with provisions of Permit No. P-2011.0132 • Annual boiler tuning	Monthly
Permit No. P-2011.0132, Condition 3.3	Emissions of sulfur dioxide (SO_2) from the Kipper boiler stack shall not exceed 214 tons per any consecutive 12-month period.	Yes	• Rolling 12-month calculations of plant emissions maintained per Permit No. P-2011.0132; • Boiler operating logs of steam production and fuel usage • Results of performance tests for SO_2 (including CEMS data) • Data on sulfur content of coal shipments • Maintenance and operation of a wet scrubber system in accordance with provisions of Permit No. P-2011.0132 • Compliance with fuel combustion limits in Permit No. P-2011.0132	• Rolling 12-month calculations of plant emissions maintained per Permit No. P-2011.0132; • Boiler operating logs of steam production and fuel usage • Results of performance tests for SO_2 (including CEMS data) • Data on sulfur content of coal shipments • Maintenance and operation of a wet scrubber system in accordance with provisions of Permit No. P-2011.0132 • Compliance with fuel combustion limits in Permit No. P-2011.0132	Monthly

COMPLIANCE CERTIFICATIONS AND CURRENT AND PROPOSED COMPLIANCE DETERMINATION METHODS

DESCRIPTION OF REQUIREMENT			COMPLIANCE DETERMINATION		
CITATION	REQUIREMENT	CURRENTLY IN COMPLIANCE?	CURRENT	PROPOSED FOR PERMIT TERM	PROPOSED FREQUENCY OF DETERMINATION
Permit No. P-2011.0132, Condition 3.4.1	Particulate matter emissions from the Kipper boiler shall not exceed 0.080 gr/dscf corrected to 8% oxygen when burning wood fuel.	Yes	• Results of performance tests for particulates • Maintenance and operation of a wet scrubber system in accordance with provisions of Permit No. P-2011.0132	• Results of performance tests for particulates • Maintenance and operation of a wet scrubber system in accordance with provisions of Permit No. P-2011.0132	Annually
Permit No. P-2011.0132, Condition 3.4.2	Particulate matter emissions from the Kipper boiler shall not exceed 0.050 gr/dscf corrected to 8% oxygen when burning coal.	Yes	Coal has not been combusted in the Kipper Boiler since initial startup and testing.	When coal is combusted compliance will be determined from: • Results of performance tests for particulates • Maintenance and operation of a wet scrubber system in accordance with provisions of Permit No. P-2011.0132	Annually
Permit No. P-2011.0132, Condition 3.4.3	When two or more types of fuel are burned concurrently, the allowable emissions shall be determined by proportioning the gross heat input and emissions standards for each fuel. The proportional heat input shall be determined in accordance with the Steam and Coal Monitoring (permit condition 3.11 of Permit No. P-2011.0132).	Yes	Coal has not been combusted in the Kipper Boiler. When coal is combusted compliance will be determined from: • Results of performance tests for particulates • Maintenance and operation of a wet scrubber system in accordance with provisions of Permit No. P-2011.0132 • Records of steam generation and coal combustion	Coal has not been combusted in the Kipper Boiler. When coal is combusted compliance will be determined from: • Results of performance tests for particulates • Maintenance and operation of a wet scrubber system in accordance with provisions of Permit No. P-2011.0132 • Records of steam generation and coal combustion	Annually
Permit No. P-2011.0132, Condition 3.5	The permittee may combust only wood or a wood-coal mixture in the Kipper boiler. The Kipper boiler may be fired using coal up to 50% of the heat input on a 24-hour average.	Yes	Records of steam generation and coal combustion	Records of steam generation and coal combustion	Annually
Permit No. P-2011.0132, Condition 3.6.1; IDAPA 58.01.01.725	The sulfur content of the coal used in the Kipper boiler shall not exceed 1.0 % by weight.	Yes	Fuel supplier certification of sulfur content of coal delivered	Fuel supplier certification of sulfur content of coal delivered	Irregularly – with each coal delivery

COMPLIANCE CERTIFICATIONS AND CURRENT AND PROPOSED COMPLIANCE DETERMINATION METHODS

DESCRIPTION OF REQUIREMENT		CURRENTLY IN COMPLIANCE?	COMPLIANCE DETERMINATION		
CITATION	REQUIREMENT		CURRENT	PROPOSED FOR PERMIT TERM	PROPOSED FREQUENCY OF DETERMINATION
Permit No. P-2011.0132, Condition 3.6.2	The total quantity of coal combusted in the Kipper boiler shall not exceed 57 tons per day and 12,228 tons per any consecutive 12-calendar month period.	Yes	Operating logs for fuel consumption	Operating logs for fuel consumption	Daily
Permit No. P-2011.0132, Condition 3.7	The Kipper boiler steam production rate shall not exceed 65,000 pounds of steam per hour on a 24-hour rolling average.	Yes	Records of steam generation	Records of steam generation	Daily
Permit No. P-2011.0132, Condition 3.8	The permittee shall install, maintain, and operate a multiclone and a wet scrubber on the Kipper boiler to control the emissions of PM and PM_{10}.	Yes	Boiler and scrubber operating and maintenance records	Boiler and scrubber operating and maintenance records	Annually
Permit No. P-2011.0132, Condition 3.10	At least once per calendar year, the permittee shall inspect the internal workings of the Kipper boiler and perform any maintenance required to maintain efficient combustion. The permittee shall maintain records of the boiler maintenance conducted to comply with this permit condition. The records shall provide the date the inspection was conducted and a description of the maintenance performed on the boiler to maintain combustion efficiency.	Yes	Boiler maintenance records	Boiler maintenance records	Annually
40 CFR 60 Subpart JJJJJJ, §63.11201, §63.11210, §63.11223, and Table 2	The boiler must be tuned biennially, with each biennial tune-up conducted no more than 25 months after the previous tune-up. Tune-up requirements include:: • As applicable, inspect the burner, and clean or replace any components of the burner as necessary (burner inspection may be delayed until the next scheduled unit shutdown, but each burner must be inspected at least once every 36 months). • Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. • Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. • Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available. • Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).	Yes	Boiler maintenance records. The initial tune-up was completed March 31, 2012.	Boiler maintenance records	Annually

COMPLIANCE CERTIFICATIONS AND CURRENT AND PROPOSED COMPLIANCE DETERMINATION METHODS

DESCRIPTION OF REQUIREMENT			COMPLIANCE DETERMINATION		
CITATION	REQUIREMENT	CURRENTLY IN COMPLIANCE?	CURRENT	PROPOSED FOR PERMIT TERM	PROPOSED FREQUENCY OF DETERMINATION
40 CFR 60 Subpart JJJJJJ, §63.11201, §62.11210, and Table 2	A one-time energy assessment must be performed by a qualified energy assessor. The energy assessment must include: • A visual inspection of the boiler system, • An evaluation of operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints, • Inventory of major systems consuming energy from affected boiler(s), • A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage, • A list of major energy conservation measures, • A list of the energy savings potential of the energy conservation measures identified, • A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments. The energy assessment must be completed by March 21, 2014. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements will satisfy the energy assessment requirement.	Yes	The assessment is not due until March 21, 2014	Plant records	Annually
40 CFR 60 Subpart JJJJJ, §63.11201, §63.11205, §63.11210, §63.11211, §63.11213, §63.11222, Table 1, Table 3, Table 5, Table 6, Table 7	Various provisions related to complying with emissions limits for mercury and carbon monoxide when combusting	Yes	The effective date for these provisions is March 21, 2014.	Review of boiler operating records to verify that coal has not been combusted until compliance with the cited regulations has been established.	Annually
BOILERS 1 AND 2					
Permit No. P-2011.0132, Condition 4.2	Particulate matter emissions from Boiler 1 and Boiler 2 shall not exceed 0.015 gr/dscf corrected to 3% oxygen when burning natural gas.	Yes	• Quarterly one-minute observation of each affected emissions point, or source, using EPA Method 22 (in 40 CFR 60 Appendix A) • Records of boiler tuning	• Quarterly one-minute observation of each affected emissions point, or source, using EPA Method 22 (in 40 CFR 60 Appendix A) • Records of boiler tuning	

COMPLIANCE CERTIFICATIONS AND CURRENT AND PROPOSED COMPLIANCE DETERMINATION METHODS

DESCRIPTION OF REQUIREMENT			COMPLIANCE DETERMINATION		
CITATION	REQUIREMENT	CURRENTLY IN COMPLIANCE?	CURRENT	PROPOSED FOR PERMIT TERM	PROPOSED FREQUENCY OF DETERMINATION
Permit No. P-2011.0132, Condition 4.3	At least once per calendar year or per a DEQ-approved schedule, the permittee shall tune and adjust the burner systems of Boiler 1 (Erie boiler) and Boiler 2 (Murray boiler) to maintain efficient combustion. The permittee shall maintain records of the boiler tuning conducted to comply with this permit condition. The records shall provide the date the tuning was conducted and a description of the adjustments made to the boiler to maintain combustion efficiency.	Yes	Boiler tuning and maintenance records	Boiler tuning and maintenance records	Annually
		PROCESS A			
Permit No. P-2011.0132, Condition 5.2	Emissions of PM_{10} from the drying process and material transfer system stacks shall not exceed any corresponding emissions rate limits: • Cooler/Dryer stack 7101 2.2 lb/hr • Cooler/Dryer stack 7102 2.2 lb/hr • Cooler/Dryer stack 7019 3.4 lb/hr	Yes	Estimates of emissions from emissions units using emission factors approved by DEQ.	Estimates of emissions from emissions units using emission factors approved by DEQ.	Monthly
Permit No. P-2011.0132, Condition 5.3	The production of dried products, including additives, from Process A shall not exceed 61 tons per 24-hour work day.	Yes	Facility production records	Facility production records	Monthly
Permit No. P-2011.0132, Condition 5.4	Each dryer [in Process A] shall combust only natural gas or be heated by steam from the plant boilers.	Yes	• Environmental staff participation in project planning • Annual review of facility air emissions compliance status	• Environmental staff participation in project planning • Annual review of facility air emissions compliance status	Annually
		PROCESS B			
Permit No. P-2011.0132, Condition 6.2	Emissions of PM_{10} from the drying process and material transfer system stacks shall not exceed any corresponding emissions rate limits: • Stack group 4000, 228, and 234 2.2 lb/hr • Stack group 311, 312, and 410/411 2.2 lb/hr • Stack group 613/614, 615/616, and 638 3.4 lb/hr	Yes	Estimates of emissions from emissions units using emission factors approved by DEQ.	Estimates of emissions from emissions units using emission factors approved by DEQ.	Monthly
Permit No. P-2011.0132, Condition 6.3	The production of dried products, including additives, from Process B shall not exceed 304 tons per 24-hour work day.	Yes	Facility production records	Facility production records	Monthly

COMPLIANCE CERTIFICATIONS AND CURRENT AND PROPOSED COMPLIANCE DETERMINATION METHODS

DESCRIPTION OF REQUIREMENT			COMPLIANCE DETERMINATION		
CITATION	REQUIREMENT	CURRENTLY IN COMPLIANCE?	CURRENT	PROPOSED FOR PERMIT TERM	PROPOSED FREQUENCY OF DETERMINATION
Permit No. P-2011.0132, Condition 6.4	Each dryer [in Process B] shall combust only natural gas or be heated by steam from the plant boilers.	Yes	• Environmental staff participation in project planning • Annual review of facility air emissions compliance status	• Environmental staff participation in project planning • Annual review of facility air emissions compliance status	Annually