

Air Quality
PERMIT TO CONSTRUCT

Permittee Basic American Foods, a Division of Basic American, Inc. - Shelley Facility

Permit Number P-2011.0131

Project ID 60942

Facility ID 011-00020

Facility Location 432 South Emerson
Shelley, ID 83274

Permit Authority

This permit (a) is issued according to the *Rules for the Control of Air Pollution in Idaho (Rules)*, IDAPA 58.01.01.200-228; (b) pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with its application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (g) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200-228.

Date Issued December 23, 2011

Darrin Pampaian, P.E., Permit Writer

Mike Simon, Stationary Source Manager

PERMIT SCOPE.....	3
FACILITY-WIDE CONDITIONS.....	5
FACILITY EMISSIONS CAP REQUIREMENTS	6
BOILER 1, BOILER 3, BOILER 4, AND BOILER 5.....	10
PROCESS A (DRYING PROCESS AND MATERIAL TRANSFER SYSTEMS).....	13
PROCESS B (DRYING PROCESS AND MATERIAL TRANSFER SYSTEMS).....	15
PLANT SPACE HEATERS.....	18
GENERAL PROVISIONS.....	19
APPENDIX A – PM ₁₀ EMISSIONS FACTORS	22
APPENDIX B – SO ₂ EMISSIONS FACTORS	23
APPENDIX C – NO _x EMISSIONS FACTORS	24
APPENDIX D – VOC EMISSIONS FACTORS	25
APPENDIX E – CO EMISSIONS FACTORS	26

PERMIT SCOPE

Purpose

- 1.1 This is a Permit to Construct (PTC) for the Shelley facility of Basic American Foods (BAF). The permit also incorporates a facility emissions cap (FEC) for the Shelley facility and continues the PTC provisions of Permit No. T2-2008.0145. The permit also establishes that the Shelley facility is a synthetic minor facility with respect to greenhouse gas emissions.
- 1.2 Those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and on the right hand margin.
- 1.3 This PTC replaces Permit to Construct and Tier II Permit No. T2-2008.0145, issued on June 4, 2009.

Regulated Sources

- 1.4 Table 1 lists all sources of regulated emissions in this permit. The sources listed are those emissions units for which emissions of any criteria air pollutant exceeds 10 per cent (10%) of the levels contained in the definition of “significant” in IDAPA 58.01.01.006.

Table 1 REGULATED SOURCES

Permit Section	Source ID	Source Descriptions	Emission Controls
Boilers			
4	Boiler 1	Manufacturer: Cleaver-Brooks Model: D-52 S/N: WL-2012 Heat input rating: 42.9 MMBtu/hr Maximum steam production rate: 33,000 lb/hr Fuels: Natural Gas Date installed: 1973	None
	Boiler 3	Manufacturer: Keeler Model: Not Stated on Name Plate S/N: 13445 Heat input rating: 28.6 MMBtu/hr Maximum steam production rate: 22,000 lb/hr Fuels: Natural Gas Date installed: 1958	None
	Boiler 4	Manufacturer: Cleaver-Brooks Model: DL-76-RH S/N: W-3511 (not labeled as S/N) Heat input rating: 72.1 MMBtu/hr Maximum steam production rate: 60,000 lb/hr Fuels: Natural Gas Date installed: 1990	None
	Boiler 5	Manufacturer: Cleaver-Brooks Model: CBI700600150 S/N: OLO 99677 Heat input rating: 24.5 MMBtu/hr Maximum steam production rate: 20,700 lb/hr Fuels: Natural Gas Date installed: 2000	None

Table 1 REGULATED SOURCES (continued)

Permit Section	Source ID	Source Descriptions	Emission Controls
Process A			
5	P1-1	Dryer - 20 MMBtu/hr, natural gas-fired	None
	P1-2	Dryer - 0.5 MMBtu/hr, natural gas-fired	None
	P1-3	Material recovery unit	None
	P2-1	Dryer - 20 MMBtu/hr, natural gas-fired	None
	P2-2	Dryer - 0.5 MMBtu/hr, natural gas-fired*	None
	P2-3	Material recovery unit	None
	P3-1	Dryer - 20 MMBtu/hr, natural gas-fired	None
	P3-2	Dryer - 0.5 MMBtu/hr, natural gas-fired	None
	P3-3	Material recovery unit	None
	P4-1	Dryer - 20 MMBtu/hr, natural gas-fired	None
	P4-2	Dryer - 0.5 MMBtu/hr, natural gas-fired	None
	P4-3	Material recovery unit	None
	P5-1	Purifier	None
P5-2	Purifier	None	
Process B			
6	P6-1	Dryer - 41 MMBtu/hr, natural gas-fired	None
	P6-2	Cooler	None
	P8-1	Dryer - Steam-heated	None
	P8-2	Dryer - Steam-heated	None
	P8-VE	Material recovery unit	None
	P8-VW	Material recovery unit	None
	P9-1	Dryer - Steam heated	None
	P10-1	Dryer - Steam heated	None
	P11-1	Dryer - Steam heated	None
	PKG-1	Material recovery unit on packaging line	None
	PKG-2	Material recovery unit on packaging line	None
	MT-2	Material recovery unit to animal feed storage	None
MT-3	Material recovery unit to bulk storage	None	
Plant Heaters			
7		Natural gas space heaters	None

FACILITY-WIDE CONDITIONS

2.1 Facility Wide Requirements

Reserved (The Tier I operating permit contains facility-wide conditions that apply to this facility.)

FACILITY EMISSIONS CAP REQUIREMENTS

3.1 Process Description

This permit authorizes changes to the facility that increase emissions of criteria pollutants for those changes that comply with the terms and conditions of this permit and that meet the requirements of IDAPA 58.01.01.181. The exemption criteria in IDAPA 58.01.01.220-222 are not applicable to changes in design or equipment at the facility that result in any change in the nature or amount of emissions, provided that the permittee complies with the conditions of Sections 3 through 8 of this permit and meets the requirements of IDAPA 58.01.01.181.

3.2 Emission Control Description

Table 3.1 FACILITY EMISSIONS DESCRIPTION

Emissions Unit(s)/Processes ¹	Emissions Control Device	Emissions Point
Boilers (natural gas-fired)	None	Boiler Stacks
Process A	None	Multiple Stacks from Process A
Process B	None	Multiple Stacks from Process B
Space heaters	None	Fugitive emissions

¹ For a detailed list of equipment see Table 1.

Emissions Limits

3.3 Criteria Pollutant Facility Emissions Cap

The PM₁₀, SO₂, NO_x, CO, and VOC emissions from this facility shall not exceed any corresponding facility emissions cap (FEC) limits listed in Table 3.2.

Table 3.2 FEC EMISSIONS LIMITS

Source Description	PM ₁₀	SO ₂	NO _x	CO	VOC	CO ₂ e
	T/yr ¹					
Total Facility Emissions Cap	93	11	240	240	13	95,000

¹ Tons per rolling 12-month period. The rolling 12-month emissions limits of Table 3.2 are referenced to calendar months. All references in this permit to this rolling 12-month emissions limit are to be interpreted using calendar months.

Monitoring and Recordkeeping Requirements

3.4 Facility-Wide Natural Gas Fuel Limit

3.4.1 Facility-wide natural gas use shall not exceed 1,529 MMscf per any consecutive 12-month period to limit greenhouse gas emissions to 95,000 tons/yr and prevent the facility from being classified a major source for greenhouse gas emissions under the PSD program (40 CFR 52.21(b)(49)(v)(b)).

3.4.2 The permittee shall maintain records of facility-wide natural gas. Natural gas utility bills may be used to demonstrate compliance with this requirement.

[DRAFT PTC Condition]

3.5 Criteria Pollutant Facility Emissions Cap Compliance

- 3.5.1** The permittee shall calculate and record estimated total PM_{10} , SO_2 , NO_x , CO , VOC , and CO_2e emissions for all combustion sources each calendar month, based on fuel consumption, steam production, or heat input rating for natural gas combustion sources, using the emission factors provided in Appendices A-E of this permit, or other DEQ approved method. Emission factors included in Appendices A-E of this Permit may be updated, with concurrence of DEQ. To update an emission factor or add a new emission factor, the permittee shall submit to DEQ the proposed revised or new emission factor and the basis for the emission factor. Upon approval by DEQ, the revised or new emission factor shall replace the corresponding emissions factor in Appendices A-E. Records of calculated combustion emissions and the operating data and emission factors used to calculate emissions shall be maintained on site for a period of at least five years and shall be made available to DEQ representatives upon request.
- 3.5.2** The permittee shall calculate and record estimated total PM_{10} and SO_2 emissions for all production-related sources each calendar month, based on pounds of unit process throughput for production processes and using the emission factors provided in Appendices A-E of this permit, or other DEQ approved method. Emission factors included in Appendices A-E of this Permit may be updated, with concurrence of DEQ. To update an emission factor, the permittee shall submit to DEQ the proposed revised emission factor and the basis for the revisions. Upon approval by DEQ, the updated emission factor shall replace the corresponding emissions factor in Appendices A-F. Records of calculated production emissions and the operating data and emission factors used to calculate emissions shall be maintained on site for a period of at least five years and shall be made available to DEQ representatives upon request.
- 3.5.3** The permittee shall calculate rolling 12-calendar month total estimated emissions of PM_{10} , SO_2 , NO_x , CO , VOC , and CO_2e for each calendar month. Emissions totals shall be available within 30 days of the end of a month. The permittee shall total PM_{10} , SO_2 , NO_x , CO , VOC , and CO_2e emissions as calculated for the combustion sources and the production sources to determine compliance with the criteria pollutant FEC. Records of the rolling 12-month emission calculations shall be maintained on site for a period of at least five years and shall be made available to DEQ representatives upon request.

[DRAFT FEC Condition]

3.6 Demonstration of Preconstruction Compliance with Toxic Standards

- 3.6.1** The permittee shall maintain documentation of compliance with the requirements of IDAPA 58.01.01.210 for any modifications made to the facility after the issuance date of this permit that may increase toxic air pollutants.

[PTC Condition]

Reporting Requirements

3.7 Reporting Requirement

Once per year, the permittee shall report to DEQ the 12-month total facility-wide criteria pollutant emissions recorded under the [Criteria Pollutant Emissions Calculation \(permit condition 3.5.3\)](#) used to determine compliance with the [Criteria Pollutant FEC \(permit condition 3.3\)](#). The report shall include, but is not limited to, all methods, equations, emissions factors, and sources for emissions factors not previously identified used to determine the 12-month total facility-wide criteria pollutant emissions. Records of the quantity of fuel consumption, steam production, and process throughput used for determining the 12-month total facility-wide criteria pollutant emissions shall be submitted with the annual report. In addition, the permittee shall provide DEQ with the 12-month rolling emissions totals generated under the [Criteria Pollutant Emissions Calculation \(permit condition 3.5.3\)](#) for the reporting period.

Any changes in the [List of Emissions Units \(permit condition 3.11\)](#) not identified in the previous annual report shall be identified and explained. The report shall be for the period [January 1st through December](#)

31st and shall be due on or before [January 30th](#) of each calendar year. All reports must be certified in accordance with IDAPA 58.01.01.123. The report shall be sent to DEQ at the following address:

Air Quality Stationary Source Division
Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706
Telephone: (208) 373-0502
Fax: (208) 373-0340

[DRAFT FEC Condition]

General FEC Conditions

3.8 Notice and Recordkeeping of Ambient Concentration Estimates

3.8.1 For facility changes that comply with the terms and conditions establishing the FEC but are not included in the estimate of ambient concentration analysis approved for the permit establishing the FEC, the permittee shall review the estimate of ambient concentration analysis. In the event the facility change would result in a significant contribution (as defined in IDAPA 58.01.01.006) above the design concentration determined by the estimate of ambient concentration analysis approved for the permit establishing the FEC, but does not cause or significantly contribute to a violation of any ambient air quality standard, the permittee shall provide notice to DEQ in accordance with IDAPA 58.01.01.181.01.b. This notice shall also identify new or modified emission factors used to estimate emissions for purposes of this review of the estimate of ambient concentration analysis and for determining compliance with the [Criteria Pollutant Facility Emissions Cap Compliance \(permit condition 3.5\)](#).

The permittee shall record and maintain documentation of the review of the ambient concentration analysis on site.

[DRAFT FEC Condition]

3.8.2 In accordance with IDAPA 58.01.01.181.03, the permittee shall use the most current EPA-approved regulatory guideline model to estimate ambient concentrations where required by the [Demonstration of Preconstruction Compliance with Toxic Standards \(permit condition 3.6.1\)](#), except where DEQ approves the permittee's use of an alternative model. The permittee is strongly encouraged to submit a modeling protocol to DEQ for review and approval prior to conducting a modeling analysis using a model that differs from that used in the permit application.

[FEC Condition]

3.9 Renewal

3.9.1 If the permittee wishes to renew this FEC permit, in accordance with IDAPA 58.01.01.179.02, the permittee shall submit a complete application for a renewal of the terms and conditions establishing the FEC at least six months before, but no earlier than 18 months before, the expiration date of this permit.

3.9.2 In accordance with IDAPA 58.01.01.177, the permittee's renewal application for this permit must include the information required under Sections 176 through 181 and Subsections 177.01 through 177.03.

3.9.3 In accordance with IDAPA 58.01.01.177.02.d, regarding Estimates of Ambient Concentrations, for a renewal of terms and conditions establishing a FEC, it is presumed that the previous permitting analysis is satisfactory, unless the Department determines otherwise.

[DRAFT FEC Condition]

3.10 Non-Renewal

- 3.10.1** If the permittee elects to not renew the terms and conditions establishing the FEC, the permittee shall notify the Department of this decision at least six months before, but not earlier than 18 months before, the expiration date of the FEC provisions of this permit.
- 3.10.2** If the permittee has made any changes or modifications in accordance with the FEC terms and conditions for which a PTC would have been needed absent the FEC, the permittee's notice shall identify the changes or modifications and request issuance of one or more PTCs to cover them.
- 3.10.3** Upon expiration of the FEC terms and conditions, all other provisions of this permit shall remain in effect as a Permit to Construct.

[DRAFT FEC Condition]

3.11 List of Emissions Units

- 3.11.1** A list of **boilers, dryers, coolers, and material recovery units (except for space heaters with emissions which are "Below Regulatory Concern")** installed at the facility, which are subject to the Permit to Construct Requirements of IDAPA 58.01.01.200, et. seq., shall be maintained by the permittee and provided to DEQ personnel upon request. The list shall include:

- Identification if equipment was included in the permit application;
- Identification if in service at time of permit issuance;
- Equipment location;
- Installation date, if installed after permit issuance;
- De-installation date if removed after permit issuance; and
- Identification if equipment is subject to NSPS requirements (40 CFR 60).

The list shall also include equipment installed in accordance with IDAPA 58.01.01.181 for which a Permit to Construct would have been required absent the Facility Emission Cap.

[FEC Condition]

BOILER 1, BOILER 3, BOILER 4, AND BOILER 5

4.1 Process Description

Boilers 1, 3, and 4 provide process steam for the Shelley plant. Boiler 5 provides steam for process water management activities. All boilers are natural gas-fired.

Boiler 1 is a Cleaver-Brooks boiler with a rated heat input of 42.9 MMBtu/hr, installed in 1973. Boiler 3 is a Keeler boiler with a rated heat input of 28.6 MMBtu/hr, installed in 1958. Boiler 4 provides steam to the processes throughout the plant. Boiler 4 is a Cleaver-Brooks boiler with a rated heat input of 72.1 MMBtu/hr, installed in 1989. Boiler 5 is a Cleaver-Brooks boiler with a rated heat input of 24.5 MMBtu/hr, installed in 2000. Boilers 4 and 5 are 40 CFR 60 Subpart Dc affected units.

Table 4. BOILER DESCRIPTIONS

Emissions Units	Emissions Unit Description	Emissions Control Device	Emissions Point
Boiler 1	Cleaver-Brooks, 42.9 MMBtu/hr	None	Boiler 1 stack
Boiler 3	Keeler, 28.6 MMBtu/hr	None	Boiler 3 stack
Boiler 4	Cleaver Brooks, 72.1 MMBtu/hr	None	Boiler 4 stack
Boiler 5	Cleaver Brooks, 24.5 MMBtu/hr	None	Boiler 5 stack

Emissions Limits

4.2 Emissions Limits

The PM₁₀, SO₂, NO_x, VOC, and CO emissions from the boilers are included in the limits in the [Criteria Pollutant Facility Emissions Cap](#) (permit condition 3.3).

[PTC Condition; IDAPA 58.01.01.203, 5/1/94]

Operating Requirements

4.3 Natural Gas Combustion

Boilers shall combust only natural gas.

[PTC Condition; IDAPA 58.01.01.203, 211.01, 5/1/94]

4.4 Boiler Capacity

Total boiler capacity shall not exceed 249 million Btu's per hour heat input to prevent the facility from becoming a "designated source" which would cause the facility to be classified as a major source under the PSD program (40 CFR 52.21).

[PTC Condition; IDAPA 58.01.01.006.30.v, 5/1/94; IDAPA 58.01.01.176.02.a, 4/11/06]

4.5 Boiler Annual Inspection and Maintenance

At least once per calendar year or per a DEQ-approved schedule, the permittee shall tune and adjust the burner systems of Boilers 1, 3, 4, and 5 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.

[PTC Condition; PTC No. 011-00020, 2/11/03; IDAPA 58.01.01.211.01, 5/1/94]

Monitoring and Recordkeeping Requirements

4.6 Monitor Boiler Fuel Usage and Annual Emissions

The permittee shall install, calibrate, maintain, and operate equipment to measure the quantity of natural gas combusted in each boiler. The permittee shall monitor and record the fuel usage for all boilers on a monthly basis using available data. The permittee shall use the emission factors listed in the appendices of this permit, or other emission factors approved by DEQ, to calculate emissions. If additional boilers are added, the permittee shall identify and use appropriate emission factors for the new boilers. Emissions from the boilers shall be included in the rolling 12-month FEC compliance demonstration in the [Criteria Pollutant Facility Emissions Cap and the Criteria Pollutant Facility Emissions Cap Compliance](#) (permit conditions 3.3 and 3.5).

[PTC Condition; PTC No. 011-00020, 2/11/03; IDAPA 58.01.01.211, 5/1/94]

4.7 New Source Performance Standards for Boilers 4 and 5

4.7.1 The permittee shall comply with the applicable requirements in 40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units for boilers 4 and 5.

4.7.2 For each boiler subject to NSPS Subpart Dc, the permittee shall record and maintain records of the amounts of fuel combusted per calendar month, in accordance with 40 CFR 60.48c(g)(2).

[40 CFR 60.48c(g)]

4.8 CO and NO_x Performance Test

If the permittee's calculated facility-wide emissions of NO_x or CO exceed 200 T/yr on a rolling 12-month basis, the permittee shall conduct a performance test to measure the respective NO_x or CO emissions from either Boiler 1, Boiler 3, or Boiler 4 to verify the NO_x or CO emissions factors for Boilers 1, 3, and 4 in Appendices C and E. The test(s) shall be conducted within 90 days of exceeding a total facility rolling 12-month emissions of 200 T/yr of NO_x or CO. The test only need be conducted for the pollutant that exceeds 200 T/yr. The test results shall be used to develop new emission factors for Boilers 1, 3, and 4.

The test(s) shall be conducted in accordance with the procedures outlined in 40 CFR 60, Appendix A, Methods 7E, 10, or a DEQ-approved alternative. The initial performance test, and any subsequent performance tests conducted to demonstrate compliance, shall be performed in accordance with IDAPA 58.01.01.157. BAF shall submit a test protocol to DEQ for approval at least 30 days prior to the scheduled test date. The protocol shall identify which boiler will be tested to generate site specific emissions factors. In addition, the following information shall be recorded during each performance test run and included in the performance test report:

- The boiler shall be operated at the worst case normal production rate during the performance test. A description of how this requirement was met shall be included in the performance test report;
- The natural gas heat input shall be monitored and recorded during the test in units of MMBtu/hr. Alternately, the heat input may be calculated using combustion calculations that utilize measured stack CO₂ emissions recorded during the test, or calculated using F factors as provided in EPA Method 19.
- The measured NO_x or CO emission rates shall be reported in units of pounds per hour and pounds per million Btu. The test results shall be used to develop a new CO or NO_x emissions factor in units of lb/MMBtu.

[PTC Condition; IDAPA 58.01.01.211.04, 5/1/94; IDAPA 58.01.01.157, 4/5/00]

Reporting Requirements

4.9 New Source Performance Standards

4.9.1 **The permittee** shall submit notification of the date of construction or reconstruction and actual startup to EPA and DEQ for any NSPS-affected natural gas boiler installed after the date of issuance of this permit in accordance with 40 CFR 60.48c.

[40 CFR 60.48c(a)]

4.9.2 **The permittee** shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of each NSPS-affected natural gas boiler, unless an alternative monitoring plan is approved by EPA. In such case, **the permittee** may follow the EPA approved monitoring plan.

[40 CFR 60 Subpart Dc]

PROCESS A (DRYING PROCESS AND MATERIAL TRANSFER SYSTEMS)

5.1 Process Description

The Shelley facility uses a variety of drying and dehydration processes. Potato granules and dehydrated piece products are dried by contact with heated air. Drying heat is provided by natural gas combustion. Raw material input to the process is cooked potatoes and food additives, including sulfites. Air suspension unit processes are also used to classify materials and to remove unsuitable fractions from the production stream.

The emissions units addressed by this section are listed in Table 5.1 and include coolers, dryers, dehydration lines, and material transfer systems. Emissions of PM from each of these sources are uncontrolled. Material Recovery Units (MRUs), in the form of cyclones and fabric filters, are integral process equipment used to separate the pneumatically conveyed product from the air stream. Drying heat is provided by both natural gas combustion and steam produced by the plant boilers.

Table 5.1 PROCESS A EMISSIONS UNIT DESCRIPTIONS

Emissions Units	Emissions Unit Description	Emissions Control Device	Emissions Point
P1-1*	Dryer, 20 MMBtu/hr, natural gas-fired*	None	P1-1
P1-2*	Dryer, 0.5 MMBtu/hr, natural gas-fired*	None	P1-2
P1-3*	Material recovery unit *	None	P1-3
P2-1*	Dryer, 20 MMBtu/hr, natural gas-fired*	None	P2-1
P2-2*	Dryer, 0.5 MMBtu/hr, natural gas-fired*	None	P2-2
P2-3*	Material recovery unit*	None	P2-3
P3-1	Dryer, 20 MMBtu/hr, natural gas-fired	None	P3-1
P3-2	Dryer, 0.5 MMBtu/hr, natural gas-fired	None	P3-2
P3-3	Material recovery unit	None	P3-3
P4-1	Dryer, 20 MMBtu/hr, natural gas-fired	None	P4-1
P4-2	Dryer, 0.5 MMBtu/hr, natural gas-fired	None	P4-2
P4-3	Material recovery unit	None	P4-3
P5-1	Purifier	None	P5-1
P5-2	Purifier	None	P5-2

* This equipment was removed from operation at the time of permit issuance. It was included in the facility emission cap calculations and modeling, so it may be put back into operation at any time.

Emissions Limits

5.2 Emissions Limits

Emissions from Process A sources are regulated as part of the [Criteria Pollutant Facility Emissions Cap](#) (permit condition 3.3).

[FEC Condition; IDAPA 58.01.01.178.01, 4/11/06]

Operating Requirements

5.3 Throughput Limits

The production of dried products, including additives, (known as “Production from New Inputs”) from aggregated Process A emission units shall not exceed 144,000 pounds per 24-hour work day to prevent exceeding the PM₁₀ emission rates used in the FEC modeling analysis. This limit may be increased to 264,000 pounds per 24-hour work day to accommodate the re-commissioning of production related to stacks P1-1, P1-2, P1-3, P2-1, P2-2, and P2-3, provided that that [the permittee](#) complies with the conditions of Sections 3-7 of this permit and meets the requirements of IDAPA 58.01.01.181.

[PTC Condition; IDAPA 58.01.01.211.01, 5/1/94]

5.4 Dryer Fuels

Each dryer shall combust only natural gas or be heated by steam from the plant boilers.

[PTC Condition; IDAPA 58.01.01.211.01, 5/1/94]

5.5 Process Identification

Process line A shall be identified by signs posted on or near the process line. Each cooler or dryer shall also be identified in a manner that will allow an inspector to identify the equipment that corresponds to the equipment listed in Table 5.1.

[PTC Condition; IDAPA 58.01.01.211.01, 5/1/94]

5.6 Stack Height Modifications

Prior to returning Process P1 to operation, [the permittee](#) shall raise Stack P1-1 to a minimum height of 62 feet above ground level or to an alternative height established in accordance with Section 3.6 of this permit. Prior to returning Process P2 to operation, [the permittee](#) shall raise Stack P2-1 to a minimum height of 62 feet above ground level or to an alternative height established in accordance with the [Notice and Recordkeeping of Ambient Concentration Estimates](#) (permit condition 3.8). [The permittee](#) may establish alternate stack heights for one or more of the stacks listed in this section in accordance with the [Notice and Recordkeeping of Ambient Concentration Estimates](#) (permit condition 3.8). If the ambient concentration analysis identifies needed stack modifications, the emissions units associated with the stack may not be operated until modifications are made to the stack to comply with the provisions of the ambient concentration analysis.

[PTC Condition; IDAPA 58.01.01.211.01, 5/1/94]

Monitoring and Recordkeeping Requirements

5.7 Throughput Monitoring

The permittee shall monitor and record, on a daily basis, the calendar date and the total product output of dried food products including additives (known as “Production from New Inputs”), in pounds per day, from each Process A emission unit when in operation.

[PTC Condition; IDAPA 58.01.01.211.01, 5/1/94]

5.8 Dryer Natural Gas Usage

The permittee shall monitor and record, on a monthly basis, the total dryer natural gas usage in order to calculate combustion emissions. [The permittee](#) does not need to record the natural gas usage for individual dryers because the emission factors are the same for natural gas combustion in all dryers.

[PTC Condition; IDAPA 58.01.01.211.01, 5/1/94]

PROCESS B (DRYING PROCESS AND MATERIAL TRANSFER SYSTEMS)

6.1 Process Description

The Shelley facility uses a variety of drying and dehydration processes. Potato granules and dehydrated piece products are dried by contact with heated air. Drying heat is provided by natural gas combustion. Raw material input to the process is cooked potatoes and food additives, including sulfites. Air suspension unit processes are also used to classify materials and to remove unsuitable fractions from the production stream.

Potato flakes are produced by drying a thin film of cooked potatoes directly on a steam-heated drum. The heat from the drum evaporates the moisture from the flakes, producing a thin sheet of dried potatoes. This sheet is then broken and crushed to produce flake products.

The facility operates packaging equipment to fill product containers with bulk product. Spices and flavorings may be added to the bulk product during the packaging process. Dust pickups located within the packaging area exhaust to the atmosphere through baghouses.

The emissions units addressed by this section are listed in Table 6.1 and include coolers, dryers, dehydration lines, and material transfer systems. Emissions of PM from each of these sources are uncontrolled. Material Recovery Units (MRUs), in the form of cyclones and fabric filters, are integral process equipment used to separate the pneumatically conveyed product from the air stream. Drying heat is provided by both natural gas combustion and steam produced by the plant boilers. Process B was initially established in the 1960's, with significant additions in 1972 (the P8 stacks), 1986 (the P6-1 and P6-2 stacks), and 1990 (the P9-1, P10-1, and P11-1 stacks).

Table 6.1 PROCESS B EMISSIONS UNIT DESCRIPTIONS

Emissions Units	Emissions Unit Description	Emissions Control Device	Emissions Point
P6-1	Dryer, 41 MMBtu/hr, natural gas-fired	None	P6-1
P6-2	Cooler	None	P6-2
P8-1*	Dryer, steam-heated*	None	P8-1A, P8-1S, P8-1N
P8-2*	Dryer, steam-heated*	None	P8-2A, P8-2S, P8-2N
P8-VE*	Material recovery unit*	None	P8-VE
P8-VW*	Material recovery unit*	None	P8-VW
P9-1	Dryer, steam heated	None	P9-1
P10-1	Dryer, steam heated	None	P10-1
P11-1	Dryer, steam heated	None	P11-1
PKG-1	Material recovery unit on packaging line	None	PKG-1
PKG-2	Material recovery unit on packaging line	None	PKG-2
MT-2	Material recovery unit to animal feed storage	None	MT-2
MT-3	Material recovery unit to bulk storage	None	MT-3

* This equipment was removed from operation at the time of permit issuance. It was included in the facility emission cap calculations and modeling, so it may be put back into operation at any time.

Emissions Limits

6.2 Emissions Limits

Emissions from Process B sources are regulated as part of the [Criteria Pollutant Facility Emissions Cap](#) (permit condition 3.3).

[FEC Condition; IDAPA 58.01.01.178.01, 4/11/06]

Operating Requirements

6.3 Throughput Limits

The total production of dried products, including additives, (known as “Production from New Inputs”) from aggregated Process B emissions units shall not exceed 218,400 pounds per 24-hour work day to prevent exceeding the PM₁₀ emission rates used in the FEC modeling analysis. This limit may be increased to 266,400 pounds per 24-hour work day to accommodate the re-commissioning of production related to stacks P8-1A, P8-1S, P8-1N, P8-2A, P8-2S, P8-2N, P8-VW, and P8-VE, provided that that the [permittee](#) complies with the conditions of Sections 3-7 of this permit and meets the requirements of IDAPA 58.01.01.181.

[PTC Condition; IDAPA 58.01.01.211.01, 5/1/94]

6.4 Dryer Fuels

Each dryer shall combust only natural gas or be heated by steam from the plant boilers.

[PTC Condition; IDAPA 58.01.01.211.01, 5/1/94]

6.5 Process Identification

Process line B shall be identified by signs posted on or near the process line. Each cooler or dryer shall also be identified in a manner that will allow an inspector to identify the equipment that corresponds to the equipment listed in Table 6.1.

[PTC Condition; IDAPA 58.01.01.211.01, 5/1/94]

6.6 Stack Height Modification

By October 31, 2009, the [permittee](#) shall have modified the identified stacks to meet the following specifications or shall have ceased operation of the dryers associated with these respective stacks:

Stack P6-1	Minimum height – 50.83 feet above ground level	Vertical discharge, 42 inch diameter (max.)
Stack P6-2	Minimum height – 50.83 feet above ground level	Vertical discharge, 30 inch diameter (max.)
Stack P9-1	Minimum height – 59 feet above ground level	Vertical discharge, 96 inch diameter (max.)
Stack P10-1	Minimum height – 59 feet above ground level	Vertical discharge, 96 inch diameter (max.)
Stack P11-1	Minimum height – 59 feet above ground level	Vertical discharge, 96 inch diameter (max.)

Prior to returning process P8 to operation, the [permittee](#) shall modify the associated stacks as follows:

Stacks P8-1A 1S 1N	Minimum height – 65 feet above ground level 67 feet above ground level 65 feet above ground level
Stacks P8-2A 2S 2N	Minimum height – 65 feet above ground lev 61 feet above ground level 60 feet above ground level
Stack P8-VE	Minimum height – 63 feet above ground level
Stack P8-VW	Minimum height – 63 feet above ground level

The [permittee](#) may establish alternate stack heights for one or more of the stacks listed in [this permit condition](#) in accordance with the ambient concentration analysis procedures of the [Notice and Recordkeeping of Ambient Concentration Estimates](#) (permit condition 3.8). For emissions units not currently operating, the emissions units associated with the stack may not be operated until modifications are made to the stack to comply with the provisions of the ambient concentration analysis. The [permittee](#) shall notify DEQ’s Pocatello Regional Office in writing of the date the stack height modifications were completed.

[IDAPA 58.01.01.403, 5/1/94]

Monitoring and Recordkeeping Requirements

6.7 Throughput Monitoring

The permittee shall monitor and record, on a daily basis, the calendar date and the total product output of dried food products including additives (known as “Production from New Inputs”), in pounds per day, from each Process B emissions unit when in operation.

[PTC Condition; IDAPA 58.01.01.211.01, 5/1/94]

6.8 Dryer Natural Gas Usage

The permittee shall monitor and record, on a monthly basis, the total dryer natural gas usage in order to calculate combustion emissions. [The permittee](#) does not need to record the natural gas usage for individual dryers because the emission factors for natural gas combustion in all dryers are the same.

[PTC Condition; IDAPA 58.01.01.211.01, 5/1/94]

PLANT SPACE HEATERS

7.1 Process Description

The BAF Shelley Facility has natural gas-fired space heaters ranging in size from less than 200,000 Btu/hr to 7.5 MMBtu/hr. At the time of permit issuance total space heater combustion capacity is 59.5 MMBtu/hr. Most of the units provide direct heating; i.e., the combustion air from the unit is discharged directly into the room to provide heating.

Emissions Limits

7.2 Emissions Limits

There are no emission limits specifically applicable to the plant space heaters. Emissions from plant space heaters are regulated as part of the [Criteria Pollutant Facility Emissions Cap](#) (permit condition 3.3).

[FEC Condition; IDAPA 58.01.01.178.01, 4/11/06]

Emissions Limits

7.3 Natural Gas Usage

The permittee shall determine the total natural gas usage of plant space heaters on a monthly basis. Gas combusted in plant space heaters will be calculated as the difference of total facility gas usage less gas combusted in boilers and process dryers. Emissions shall be calculated using the emission factors in the appendices of the permit.

[FEC Condition; IDAPA 58.01.01.178, 4/11/06]

GENERAL PROVISIONS

General Compliance

8.1 The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the *Rules for the Control of Air Pollution in Idaho*. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the *Rules for the Control of Air Pollution in Idaho*, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.

[Idaho Code §39-101, et seq.]

8.2 The permittee shall at all times (except as provided in the *Rules for the Control of Air Pollution in Idaho*) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[IDAPA 58.01.01.211, 5/1/94]

8.3 Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules and regulations.

[IDAPA 58.01.01.212.01, 5/1/94]

Inspection and Entry

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

8.4.1 Enter upon the permittee's premises where an emissions source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;

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

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

8.4.4 As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

Construction and Operation

8.5 This permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year.

[IDAPA 58.01.01.211.02, 5/1/94]

8.6 The permittee shall furnish DEQ written notifications as follows in accordance with IDAPA 58.01.01.211:

8.6.1 A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;

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

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

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

[IDAPA 58.01.01.211.03, 5/1/94]

Performance Testing

- 8.7 If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ, at its option, may have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.
- 8.8 All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.
- 8.9 Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00]

Monitoring and Recordkeeping

- 8.10 The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Records of monitoring information shall include, but not be limited to the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

Excess Emissions

- 8.11 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

[IDAPA 58.01.01.130-136, 4/5/00]

Certification

- 8.12 All documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

False Statements

8.13 No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.
[IDAPA 58.01.01.125, 3/23/98]

Tampering

8.14 No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.
[IDAPA 58.01.01.126, 3/23/98]

Transferability

8.15 This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.
[IDAPA 58.01.01.209.06, 4/11/06]

Severability

8.16 The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
[IDAPA 58.01.01.211, 5/1/94]

APPENDIX A – PM₁₀ EMISSIONS FACTORS

Production Process	Stack Identification Code	Emissions Factor	
		Emissions Factor	Units
Boilers	Boiler 1	0.0075	lb-PM ₁₀ /MMBtu
Boilers	Boiler 3	0.0075	lb-PM ₁₀ /MMBtu
Boilers	Boiler 4	0.0076	lb-PM ₁₀ /MMBtu
Boilers	Boiler 5	0.0071	lb-PM ₁₀ /MMBtu
Process A	P1-1	1.040	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process A	P1-2	0.033	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process A	P1-3	0.002	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process A	P2-1	1.040	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process A	P2-2	0.033	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process A	P2-3	0.002	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process A	P3-1	1.040	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process A	P3-2	0.033	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process A	P3-3	0.002	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process A	P4-1	1.040	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process A	P4-2	0.033	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process A	P4-3	0.002	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process A	P5-1	0.003	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process A	P5-2	0.003	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process B	P6-1	0.521	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process B	P6-2	0.261	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process B	P8-1N	0.068	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process B	P8-1S	0.068	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process B	P8-1A	0.015	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process B	P8-2N	0.068	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process B	P8-2S	0.068	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process B	P8-2A	0.015	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process B	P8-VE	0.034	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process B	P8-VW	0.034	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process B	P9-1	0.750	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process B	P10-1	0.750	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process B	P11-1	0.750	lb-PM ₁₀ /1,000 lbs Production from New Inputs
Process B	Pkg-1	0.00005	lb-PM ₁₀ /1,000 lbs Total product packaged
Process B	Pkg-2	0.009	lb-PM ₁₀ /1,000 lbs Total product packaged
Process B	MT-2	0.074	lb-PM ₁₀ /1,000 lbs Production from New Inputs x 0.01
Process B	MT-3	0.002	lb-PM ₁₀ /1,000 lbs Total product packaged
Plant	Heaters	0.007	lb-PM ₁₀ /MMBtu

APPENDIX B – SO₂ EMISSIONS FACTORS

Production Process	Stack Identification Code	Process Related Emissions Factor		Combustion Related Emissions Factor	
		Emissions Factor	Units	Emissions Factor	Units
Boilers	Boiler 1	-	N/A	0.0024	lb-SO ₂ /MMBtu
Boilers	Boiler 3	-	N/A	0.0024	lb-SO ₂ /MMBtu
Boilers	Boiler 4	-	N/A	0.0024	lb-SO ₂ /MMBtu
Boilers	Boiler 5	-	N/A	0.0024	lb-SO ₂ /MMBtu
Process A	P1-1	0.080	lb-SO ₂ /1,000 lbs Production from New Inputs	0.0024	lb-SO ₂ /MMBtu
Process A	P1-2	0.004	lb-SO ₂ /1,000 lbs Production from New Inputs	0.0024	lb-SO ₂ /MMBtu
Process A	P2-1	0.080	lb-SO ₂ /1,000 lbs Production from New Inputs	0.0024	lb-SO ₂ /MMBtu
Process A	P2-2	0.004	lb-SO ₂ /1,000 lbs Production from New Inputs	0.0024	lb-SO ₂ /MMBtu
Process A	P3-1	0.080	lb-SO ₂ /1,000 lbs Production from New Inputs	0.0024	lb-SO ₂ /MMBtu
Process A	P3-2	0.004	lb-SO ₂ /1,000 lbs Production from New Inputs	0.0024	lb-SO ₂ /MMBtu
Process A	P4-1	0.080	lb-SO ₂ /1,000 lbs Production from New Inputs	0.0024	lb-SO ₂ /MMBtu
Process A	P4-2	0.004	lb-SO ₂ /1,000 lbs Production from New Inputs	0.0024	lb-SO ₂ /MMBtu
Process B	P6-1	0.080	lb-SO ₂ /1,000 lbs Production from New Inputs	0.0024	lb-SO ₂ /MMBtu
Process B	P6-2	0.040	lb-SO ₂ /1,000 lbs Production from New Inputs	-	N/A
Process B	P8-1N	0.019	lb-SO ₂ /1,000 lbs Production from New Inputs	-	N/A
Process B	P8-1S	0.019	lb-SO ₂ /1,000 lbs Production from New Inputs	-	N/A
Process B	P8-2N	0.019	lb-SO ₂ /1,000 lbs Production from New Inputs	-	N/A
Process B	P8-2S	0.019	lb-SO ₂ /1,000 lbs Production from New Inputs	-	N/A
Process B	P9-1	0.076	lb-SO ₂ /1,000 lbs Production from New Inputs	-	N/A
Process B	P10-1	0.076	lb-SO ₂ /1,000 lbs Production from New Inputs	-	N/A
Process B	P11-1	0.076	lb-SO ₂ /1,000 lbs Production from New Inputs	-	N/A
Plant	Heaters	-	N/A	0.0024	lb-SO ₂ /MMBtu

APPENDIX C – NO_x EMISSIONS FACTORS

Production Process	Stack Identification Code	Emissions Factor	
		Emissions Factor	Units
Boilers	Boiler 1	0.098	lb-NO _x /MMBtu
Boilers	Boiler 3	0.098	lb-NO _x /MMBtu
Boilers	Boiler 4	0.141	lb-NO _x /MMBtu
Boilers	Boiler 5	0.072	lb-NO _x /MMBtu
Process A	P1-1	0.061	lb-NO _x /MMBtu
Process A	P1-2	0.061	lb-NO _x /MMBtu
Process A	P2-1	0.061	lb-NO _x /MMBtu
Process A	P2-2	0.061	lb-NO _x /MMBtu
Process A	P3-1	0.061	lb-NO _x /MMBtu
Process A	P3-2	0.061	lb-NO _x /MMBtu
Process A	P4-1	0.061	lb-NO _x /MMBtu
Process A	P4-2	0.061	lb-NO _x /MMBtu
Process B	P6-1	0.061	lb-NO _x /MMBtu
Plant	Heaters	0.098	lb-NO _x /MMBtu

APPENDIX D – VOC EMISSIONS FACTORS

Production Process	Stack Identification Code	Emissions Factor	
		Emissions Factor	Units
Boilers	Boiler 1	0.0054	lb-VOC/MMBtu
Boilers	Boiler 3	0.0054	lb-VOC/MMBtu
Boilers	Boiler 4	0.018	lb-VOC/MMBtu
Boilers	Boiler 5	0.020	lb-VOC/MMBtu
Process A	P1-1	0.0054	lb-VOC/MMBtu
Process A	P1-2	0.0054	lb-VOC/MMBtu
Process A	P2-1	0.0054	lb-VOC/MMBtu
Process A	P2-2	0.0054	lb-VOC/MMBtu
Process A	P3-1	0.0054	lb-VOC/MMBtu
Process A	P3-2	0.0054	lb-VOC/MMBtu
Process A	P4-1	0.0054	lb-VOC/MMBtu
Process A	P4-2	0.0054	lb-VOC/MMBtu
Process B	P6-1	0.0054	lb-VOC/MMBtu
Plant	Heaters	0.0054	lb-VOC/MMBtu

APPENDIX E – CO EMISSIONS FACTORS

Production Process	Stack Identification Code	Emissions Factor	
		Emissions Factor	Units
Boilers	Boiler 1	0.0824	lb-CO/MMBtu
Boilers	Boiler 3	0.0824	lb-CO/MMBtu
Boilers	Boiler 4	0.156	lb-CO/MMBtu
Boilers	Boiler 5	0.145	lb-CO/MMBtu
Process A	P1-1	0.260	lb-CO/MMBtu
Process A	P1-2	0.260	lb-CO/MMBtu
Process A	P2-1	0.260	lb-CO/MMBtu
Process A	P2-2	0.260	lb-CO/MMBtu
Process A	P3-1	0.260	lb-CO/MMBtu
Process A	P3-2	0.260	lb-CO/MMBtu
Process A	P4-1	0.260	lb-CO/MMBtu
Process A	P4-2	0.260	lb-CO/MMBtu
Process B	P6-1	0.260	lb-CO/MMBtu
Plant	Heaters	0.0824	lb-CO/MMBtu