APPENDIX A

IDAHO DEQ COMPLETENESS DETERMINATION FORMS FOR TIER I PERMIT APPLICATION

AIR QUALITY OPERATING PERMIT APPLICATION CHECKLIST

Prepared for:
Air Quality Permitted Facilities

By:
Idaho Division of Environmental Quality
Air Quality Permitting Bureau
Operating Permits Section

COMPLETENESS DETERMINATION CHECKLIST AND APPLICATION INDEX

Company Name Basic American Foods

Location Rexburg, ID

Project Application for Renewal of Tier I Air Operating Permit

Reviewer _____ **Date** _____

The attached forms have been provided as a checklist and application index to ensure all the required information have been included with the air pollution source permit application. These forms shall be submitted along with the application. These checklist/index forms include the following elements of the permit application:

- **Application Forms**
- **Source Descriptions**
- **Source Flow Diagrams**
- **Plot Plans**
- **Emission Estimate References and Documentation**
- **Excess Emission Documentation**
- **Ambient Air Impact Analysis**
- **Compliance Certification Plan**

Each page of the permit application shall be numbered so that each page can be referenced individually. This will allow these checklist forms to act as the permit application table of contents.

APPLICATION FORMS

SECTION	SOURCE	PAGE
1	General	2
2	Kipper Boiler, Boiler 1, Boiler 2	Appx. B
3	Process Stacks, Prcesses A, B	Appx. B
7	Materials Transport	Appx. B
8	Haul Roads	Appx. B

	YES	NO
☞ Is the application signed and dated?	___	___
☞ Are all the forms adequately completed?	___	___

SOURCE DESCRIPTIONS

SOURCE	PAGE
Plant Process	8
Boilers	11
Process A	13
Process B	15

	YES	NO
☞ Are the existing facilities described?	X	
☞ Are the modifications or new facilities described?	NA	
☞ Are all applicable processes, materials, ventilation, and controls described?	X	
☞ Are all equipment referenced by specific ID name or number?	X	

SOURCE FLOW DIAGRAMS

SOURCE	PAGE
Plantwide Process Schematic	Figure 2-3
Boilers	Figure 3-1
Process A	Figure 3-2
Process B	Figures 3-3a - 3-3d

	YES	NO
☞ Are included?	X	
☞ Shows entire existing facility?	X	
☞ Shows entire future facility?	NA	
☞ Shows each process separately (if needed)?	X	
☞ Details storage, roads, transfers, and processing?	X	
☞ Labeling is adequate (processes and stacks identified, flowrates, and process rates shown)?	X	

PLOT PLANS

SOURCE	PAGE
Plantwide	Figures 2-1 and 2-2

	YES	NO
☞ Is included?	X	
☞ Shows location coordinates?	X	
☞ Shows plant boundaries?	X	
☞ Shows neighboring ownership and facilities?		X
☞ Shows topography?	X	
☞ Scale shown or distances adequately labeled?	X	
☞ Shows all buildings, equipment, storage, and roads?	X	
☞ Is adequate for both existing and future or includes both?	NA	

EMISSION ESTIMATE REFERENCES AND DOCUMENTATION

SOURCE	PAGE
All Emissions Units	Appendices B and C

	YES	NO
☞ All fugitive and point sources listed?	X	
☞ All pollutants addressed?	X	
☞ Process documentation and specs included?	X	
☞ Control equipment documentation and specs included?	X	
☞ Emission factors documented and referenced?	X	
☞ Calculations and assumptions shown?	X	
☞ Source tests referenced (test includes processing and control device test conditions)?	X	

EXCESS EMISSION DOCUMENTATION

SOURCE	PAGE
All Emissions Units (Generic)	34

	YES	NO
☞ All three types of excess emissions (startup, shutdown, and scheduled maintenance) covered for each source?	X	
☞ Calculations and documentation included?	NA	
☞ Expected frequencies of excess emissions noted?	X	
☞ Justification for amounts and frequencies of excess emissions?	NA	
☞ Procedures for minimizing excess emissions covered?	X	

AMBIENT AIR IMPACT ANALYSIS Not Applicable for Tier I Permit

PROJECT	PAGE
Existing ambient air quality discussion including attainment status and classification of areas which may be significantly impacted.	____
Discussion of dispersion model use and assumptions.	____
Dispersion model input.	____
Disperson model output.	____
Discussion of ambient impacts for each pollutant.	____
Discussion of how excessive impacts will be controlled or avoided for sources and pollutants with the potential for these.	____

COMPLIANCE CERTIFICATION PLAN

SOURCE	PAGE
General Plantwide Activities	19-33
All Emissions Units (generic)	33-45
Indirect Fired Combustion Units (Generic)	46-49
Kipper Boiler	50-54
Boilers 1 and 2	54-56
Process A	57-61
Process B	62-67
Schedule for Submittal of Compliance Certifications	72
Contents of Compliance Reports	73-76

	YES	NO
☞ Monitoring, recordkeeping, and reporting discussed?	X	
☞ Stack testing methods thoroughly documented?	X	
☞ Discussion and documentation of process control mechanisms used to meet emission limits?	X	
☞ Quality assurance/quality control discussed?	NA	
☞ Monitoring equipment specifications and documentation included?	NA	

APPENDIX B

EMISSIONS UNIT DATA TABLES (DEQ AIR QUALITY OPERATING PERMIT APPLICATION FORMS IN SPREADSHEET FORMAT)

SECTION 2: FUEL BURNING

Stack Description	Kipper Boiler		Boiler 1	Boiler 2	Heaters
DEQ Use Only					
DEQ Plant ID Code					
DEQ Process Code					
DEQ Stack ID Code					
DEQ Building Code					
Primary SCC					
Secondary SCC					
DEQ Segment Code					
Part A: General Information					
Process Code or Description	Boiler		Boiler	Boiler	Plant
Stack Description	Kipper Boiler		Boiler 1	Boiler 2	Heaters
Building Description	See Plot Plan		See Plot Plan	See Plot Plan	-
Manufacturer	Kipper & Sons		Springfield	Murray	various
Model			52	-	-
Date Installed	1981		1975	1982	various
Last Date Modified	1981				
Rated Capacity					
Million BTU/hr	90		52	35	30.8
Burner Type	1		11	11	11
Percent Used for Process	100		100	100	0
Percent Used for Space Heat	0		0	0	100
Fuel Data					
	Wood Only	Wood:coal	Primary Fuel	Primary Fuel	Primary Fuel
Fuel Code	08	08 & 10 (50% mix)	01	01	01
Heat Content	9000 Btu/lb BDS	9,250 Btu/lb	1020 Btu/scf	1020 Btu/scf	1020 Btu/scf
Maximum Hourly Combustion Rate	10,000	9,730	50,980	34,314	30,196
Normal Annual Combustion Rate	87,600,000	85,232,432	446,588,235	300,588,235	132,258,824
Part B: Operating Data					
Percent Fuel Consumption: Dec-F	25		25	25	40
Mar-May	25		25	25	25
Jun-Aug	25		25	25	10
Sep-Nov	25		25	25	25
Operating Schedule: Hours/d	24		24	24	24
Days/wee	7		7	7	7
Weeks/yea	51		51	51	51
Hours/year	8760		8760	8760	8760
Pollution Control Equipment					
Type	Multiclone	wet scrubber	None	None	None
Type Code	077	002	000	000	000
Ventilation and Building/Area D					
Enclosed (Y/N)	Y		Y	Y	Y
Hood type					
Minimum flow (acfm)					
Percent Capture Efficiency					
Building height (ft)	66		66	66	66
Building /area length (ft)	100		100	100	100
Building/area width (ft)	70		70	70	70
Ground elevation (ft)	4863		4863	4863	4863
UTM x coordinate (km)	437		437	437	437
UTM y coordinate (km)	4854		4854	4854	4854
Stack type	02		02	02	02
Stack height from ground level (ft)	66		36	36	30
Stack exit diameter (ft) (modeled cond	4.00		3.00	3.00	0.00
Stack exit gas flowrate (acfm) (modele	26,238		19,972	13,154	0
Stack exit temperature (F)	129		500	500	70

SECTION 2: FUEL BURNING

Stack Description	Kipper Boiler	Boiler 1	Boiler 2	Heaters
Criteria Air Pollutant Emissions				
PM: Emission Factor (lbs/MM Btu)	0.184	0.007	0.007	0.007
Emission Factor (lbs/hour)	16.59	0.39	0.26	0.23
Percent Control Efficiency	included in emission factor			
Estimated or Measured Emissi	16.59	0.39	0.26	0.23
Allowable emissions (lbs/hr)				
Allowable emissions (tons/yr)				
Reference	Appendix C	Appendix C	Appendix C	Appendix C
PM10: Emission Factor (lbs/MM Btu)	0.181	0.007	0.007	0.007
Emission Factor (lbs/hour)	16.25	0.39	0.26	0.23
Percent Control Efficiency				
Estimated or Measured Emissi	16.25	0.39	0.26	0.23
Allowable emissions (lbs/hr)				
Allowable emissions (tons/yr)				
Reference	Appendix C	Appendix C	Appendix C	Appendix C
SO2: Emission Factor (lbs/MM Btu)	0.543	0.002	0.002	0.002
Emission Factor (lbs/hour)	48.89	0.12	0.08	0.07
Percent Control Efficiency				
Estimated or Measured Emissi	48.89	0.12	0.08	0.07
Allowable emissions (lbs/hr)				
Allowable emissions (tons/yr)				
Reference	Appendix C	Appendix C	Appendix C	Appendix C
CO: Emission Factor (lbs/MM Btu)	0.618	0.082	0.082	0.082
Emission Factor (lbs/hour)	55.62	4.28	2.88	2.54
Percent Control Efficiency				
Estimated or Measured Emissi	55.62	4.28	2.88	2.54
Allowable emissions (lbs/hr)				
Allowable emissions (tons/yr)				
Reference	Appendix C	Appendix C	Appendix C	Appendix C
NOx: Emission Factor (lbs/MM Btu)	0.304	0.098	0.098	0.098
Emission Factor (lbs/hour)	27.38	5.10	3.43	3.02
Percent Control Efficiency				
Estimated or Measured Emissi	27.38	5.10	3.43	3.02
Allowable emissions (lbs/hr)				
Allowable emissions (tons/yr)				
Reference	Appendix C	Appendix C	Appendix C	Appendix C
VOC Emission Factor (lbs/MM Btu)	0.033	0.005	0.005	0.005
Emission Factor (lbs/hour)	2.94	0.28	0.19	0.17
Percent Control Efficiency				
Estimated or Measured Emissi	2.94	0.28	0.19	0.17
Allowable emissions (lbs/hr)				
Allowable emissions (tons/yr)				
Reference	Appendix C	Appendix C	Appendix C	Appendix C
Lead Emission Factor (lbs/MM Btu)	4.80E-05	4.90E-07	4.90E-07	4.90E-07
Emission Factor (lbs/hour)	4.32E-03	2.55E-05	1.72E-05	1.51E-05
Percent Control Efficiency				
Estimated or Measured Emissi	4.32E-03	2.55E-05	1.72E-05	1.51E-05
Reference	Appendix C	Appendix C	Appendix C	Appendix C

SECTION 2: FUEL BURNING

SECTION 2, CON'T. HAP EMISSIONS - KIPPER BOILER

Wood Waste Emission Factors (AP-42, Chapter 1.6)		Emission Rate, lb/hr		Coal Emisions (AP-42, Chapter 1.1)		
Constituent	lb/MMBtu	100% wood firing	50% wood firing	Constituent	lb/MMBtu	Emission Rate, lb/hr 50% coal firing
Acetaldehyde	8.30E-04	7.47E-02	3.74E-02	2,3,7,8-TCDD	7.53E-13	3.39E-11
Acetophenone	3.20E-09	2.88E-07	1.44E-07	Total PCDF	5.74E-11	2.58E-09
Acrolein	4.00E-03	3.60E-01	1.80E-01	POM (sum of POM consituuents li	1.09E-06	4.92E-05
Benzene	4.20E-03	3.78E-01	1.89E-01	5-Methyl chrysene		
Bis(2-ethylhexyl)phthalate (DEHP)	4.70E-08	4.23E-06	2.12E-06	Acenaphthene		
Methyl bromide (bromomethane)	1.50E-05	1.35E-03	6.75E-04	Acenaphthylene		
2-Butanone (MEK)	5.40E-06	4.86E-04	2.43E-04	Anthracene		
Carbon tetrachloride	4.50E-05	4.05E-03	2.03E-03	Benzo(a)anthracene		
Chlorine	7.90E-04	7.11E-02	3.56E-02	Benzo(a)pyrene		
Chlorobenzene	3.30E-05	2.97E-03	1.49E-03	Benzo(b,j,k)fluoranthene		
Chloroform	2.80E-05	2.52E-03	1.26E-03	Benzo(g,h,i)perylene		
Methyl chloride (chloromethane)	2.30E-05	2.07E-03	1.04E-03	Biphenyl		
Ethylene dichloride (dichloroethane)	2.90E-05	2.61E-03	1.31E-03	Chrysene		
Dichloromethane	2.90E-04	2.61E-02	1.31E-02	Fluoranthene		
1,2-Dichloropropane	3.30E-05	2.97E-03	1.49E-03	Fluorene		
2,4-Dinitrophenol	1.80E-07	1.62E-05	8.10E-06	Indeno(1,2,3-cd)pyrene		
Ethyl benzene	3.10E-05	2.79E-03	1.40E-03	Naphthalene		
Formaldehyde	4.40E-03	3.96E-01	1.98E-01	Phenanthrene		
Total PCDF	1.87E-09	1.68E-07	8.41E-08	Pyrene		
Heptachlorodibenzo-p-furans				Acetaldehyde	3.00E-05	1.35E-03
Hexachlorodibenzo-p-furans				Acetophenone	7.89E-07	3.55E-05
Octachlorodibenzo-p-furans				Acrolein	1.53E-05	6.87E-04
Pentachlorodibenzo-p-furans				Benzene	6.84E-05	3.08E-03
2,3,7,8-Tetrachlorodibenzo-p-furans				Benzyl chloride	3.68E-05	1.66E-03
Tetrachlorodibenzo-p-furans				Bis(2-ethylhexyl)phthalate (DEHP)	3.84E-06	1.73E-04
Hydrogen chloride	1.90E-02	1.71E+00	8.55E-01	Bromoform	2.05E-06	9.24E-05
Naphthalene	9.70E-05	8.73E-03	4.37E-03	Carbon disulfide	6.84E-06	3.08E-04
4-Nitrophenol	1.10E-07	9.90E-06	4.95E-06	2-Chloroacetophenone	3.68E-07	1.66E-05
Pentachlorophenol	5.10E-08	4.59E-06	2.30E-06	Chlorobenzene	1.16E-06	5.21E-05
Phenol	5.10E-05	4.59E-03	2.30E-03	Chloroform	3.11E-06	1.40E-04
Styrene	1.90E-03	1.71E-01	8.55E-02	Cumene	2.79E-07	1.26E-05
2,3,7,8-TCDD	8.60E-12	7.74E-10	3.87E-10	Cyanide	1.32E-04	5.92E-03
Tetrachloroethene	3.80E-05	3.42E-03	1.71E-03	2,4-Dinitrotoluene	1.47E-08	6.63E-07
Toluene	9.20E-04	8.28E-02	4.14E-02	Dimethyl sulfate	2.53E-06	1.14E-04
1,1,1-Trichloroethane	3.10E-05	2.79E-03	1.40E-03	Ethyl benzene	4.95E-06	2.23E-04
Trichloroethene	3.00E-05	2.70E-03	1.35E-03	Ethyl chloride	2.21E-06	9.95E-05
2,4,6-Trichlorophenol	2.20E-08	1.98E-06	9.90E-07	Ethylene dichloride (dichloroethan	2.11E-06	9.47E-05
Vinyl Chloride	1.80E-05	1.62E-03	8.10E-04	Ethylene dibromide	6.32E-08	2.84E-06
Xylenes	2.50E-05	2.25E-03	1.13E-03	Formaldehyde	1.26E-05	5.68E-04
POM (sum of POM consituuents)	2.78E-05	2.50E-03	1.25E-03	Hexane	3.53E-06	1.59E-04
Antimony	7.90E-06	7.11E-04	3.56E-04	Antimony	9.47E-07	4.26E-05
Arsenic	2.20E-05	1.98E-03	9.90E-04	Arsenic	2.16E-05	9.71E-04
Beryllium	1.10E-06	9.90E-05	4.95E-05	Beryllium	1.11E-06	4.97E-05
Cadmium	4.10E-06	3.69E-04	1.85E-04	Cadmium	2.68E-06	1.21E-04
Chromium, total	2.10E-05	1.89E-03	9.45E-04	Chromium, total	1.37E-05	6.16E-04
Chromium, hexavalent	3.50E-06	3.15E-04	1.58E-04	Cobalt	5.26E-06	2.37E-04
Cobalt	6.50E-06	5.85E-04	2.93E-04	Lead	2.21E-05	9.95E-04
Lead	4.80E-05	4.32E-03	2.16E-03	Manganese	2.58E-05	1.16E-03
Manganese	1.60E-03	1.44E-01	7.20E-02	Mercury	4.37E-06	1.97E-04
Mercury	3.50E-06	3.15E-04	1.58E-04	Nickel	1.47E-05	6.63E-04
Nickel	3.30E-05	2.97E-03	1.49E-03	Selenium	6.84E-05	3.08E-03
Selenium	2.80E-06	2.52E-04	1.26E-04		**7.17E-02**	**3.23E+00**
	3.86E-02	**3.48E+00**	**1.74E+00**			

SECTION 2, CON'T. HAP EMISSIONS, BOILER 1, BOILER 2, AND PLANT HEATERS

Natural Gas Emision Factors (AP-42, Chapter 1.4)			Emission Rate, lb/hr		
Constituent		lb/MMBtu	Boiler 1	Boiler 2	Heaters
Lead		4.90E-07	2.55E-05	1.72E-05	1.51E-05
POM (sum of POM consituuents listed below)		8.65E-08	4.50E-06	3.03E-06	2.66E-06
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		2.06E-06	1.07E-04	7.21E-05	6.34E-05
Dichlorobenzene		1.18E-06	6.12E-05	4.12E-05	3.62E-05
Formaldehyde		7.35E-05	3.82E-03	2.57E-03	2.26E-03
Hexane		1.76E-03	9.18E-02	6.18E-02	5.44E-02
Naphthalene		5.98E-07	3.11E-05	2.09E-05	1.84E-05
Toluene		3.33E-06	1.73E-04	1.17E-04	1.03E-04
Arsenic		1.96E-07	1.02E-05	6.86E-06	6.04E-06
Beryllium		1.18E-08	6.12E-07	4.12E-07	3.62E-07
Cadmium		1.08E-06	5.61E-05	3.77E-05	3.32E-05
Chromium		1.37E-06	7.14E-05	4.80E-05	4.23E-05
Cobalt		8.24E-08	4.28E-06	2.88E-06	2.54E-06
Manganese		3.73E-07	1.94E-05	1.30E-05	1.30E-05
Mercury		2.55E-07	1.33E-05	8.92E-06	8.92E-06
Nickel		2.06E-06	1.07E-04	7.21E-05	7.21E-05
Selenium		2.35E-08	1.22E-06	8.24E-07	8.24E-07
	Total HAP Emission Factor:	**1.85E-03**	**9.63E-02**	**6.48E-02**	**6.48E-02**

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process A	Process A	Process A	Process A	Process A
Stack Description	7020	7101	7102	7019	7001

DEQ Use Only

DEQ Plant ID Code					
DEQ Process Code					
DEQ Stack ID Code					
DEQ Building Code					
Primary SCC					
Secondary SCC					
DEQ Segment Code					

Part A: General Information

Process Code or Description	Process A	Process A	Process A	Process A	Process A
Stack Description	7020	7101	7102	7019	7001
Building Description	See Plot Plan	See Plot Plan	See Plot Plan	See Plot Plan	See Plot Plan
Manufacturer	Custom	Custom	Custom	Custom	Custom
Model	-	-	-	-	-
Date Installed	1989	1965	1965	1994	1965
Last Date Modified					

Processing Data

Input #1	Material Description	cooked food	cooked food	cooked food	cooked food	cooked food
	Maximum Rate (1000 lbs/hour)	0	0	0	0	0
	Actual Rate (1000 lbs/hour)	0	0	0	0	0
Input #2	Material Description		natural gas	natural gas	natural gas	
	Maximum Rate (MMBtu/hr)		6.5	6.5	6.6	
	Actual Rate (1000 lbs/hour)		6.5	6.5	6.6	
Output	Material Description	dried food	dried food	dried food	dried food	dried food
	Maximum Rate (1000 lbs/hour)	40.8	20.4	20.4	40.8	5.1
	Actual Rate (1000 lbs/hour)	40.8	20.4	20.4	40.8	5.1

Potential HAPs in Process Stream

HAP Description		None	None	None	None	None

Part B: Operating Data

Percent Fuel Consumption:	Dec-Feb		25	25	25	
	Mar-May		25	25	25	
	Jun-Aug		25	25	25	
	Sep-Nov		25	25	25	
Operating Schedule:	Hours/day	24	24	24	24	24
	Days/week	7	7	7	7	7
	Weeks/year	52	52	52	52	52

Pollution Control Equipment

Type	None	None	None	None	None
Type Code	000	000	000	000	000

Ventilation and Building/Area Data

Enclosed (Y/N)	Y	Y	Y	Y	Y
Hood type					
Minimum flow (acfm)					
Percent Capture Efficiency					
Building height (ft)	70	70	70	70	70
Building /area length (ft)	500	500	500	500	500
Building/area width (ft)	220	220	220	220	220
Ground elevation (ft)	4863	4863	4863	4863	4863
UTM x coordinate (km)	437	437	437	437	437
UTM y coordinate (km)	4854	4854	4854	4854	4854
Stack type	03	02	02	02	02
Stack height from ground level (ft)	72	71	71	66	66
Stack exit diameter (ft) (as modeled)	1.67	3.54	3.54	2.58	1.33
Stack exit gas flowrate (acfm) (as modeled)	0	0	0	0	0
Stack exit temperature (F)	97	174	153	135	90

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process A	Process A	Process A	Process A	Process A
Stack Description	7020	7101	7102	7019	7001
Air Pollutant Emissions					
PM: Emission Factor, lbs/000 lbs	0.018	0.140	0.140	0.116	0.053
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00	0.00	0.00	0.00	0.00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
PM10: Emission Factor, lbs/000 lbs	0.010	0.106	0.106	0.083	0.046
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00	0.00	0.00	0.00	0.00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
SO2: Emission Factor - process operation, lbs/000 lbs	0.0000	0.0050	0.0050	0.0050	0.0050
Emission Factor - fuel combustion, lbs/MMBtu		0.0024	0.0024	0.0024	
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00	0.02	0.02	0.02	0.00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
CO: Emission Factor, lbs/MMBtu		0.260	0.260	0.260	
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.000	1.690	1.690	1.716	0.000
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
NOx: Emission Factor, lbs/MMBtu		0.051	0.051	0.051	
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.000	0.332	0.332	0.337	0.000
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
VOC Emission Factor, lbs/MMBtu		0.005	0.005	0.005	
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.000	0.035	0.035	0.036	0.000
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
Lead Emission Factor, lbs/MMBtu		4.90E-07	4.90E-07	4.90E-07	
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00E+00	3.19E-06	3.19E-06	3.24E-06	0.00E+00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process A	Process A	Process A	Process A	Process A
Stack Description	7020	7101	7102	7019	7001
Hazardous Air Pollutants					
POM (including naphthalene)					
Emission Factor, lbs/MMBtu		8.65E-08	8.65E-08	8.65E-08	
Percent Control Efficiency		0	0	0	
Estimated or Measured Emissions (lbs/hr)		5.62E-07	5.62E-07	5.71E-07	
Reference		o	AP-42	AP-42	
Benzene					
Emission Factor, lbs/MMBtu		2.06E-06	2.06E-06	2.06E-06	
Percent Control Efficiency		0	0	0	
Estimated or Measured Emissions (lbs/hr)		1.34E-05	1.34E-05	1.36E-05	
Reference		AP-42	AP-42	AP-42	
Dichlorobenzene					
Emission Factor, lbs/MMBtu		1.18E-06	1.18E-06	1.18E-06	
Percent Control Efficiency		0.00E+00	0.00E+00	0.00E+00	
Estimated or Measured Emissions (lbs/hr)		7.65E-06	7.65E-06	7.76E-06	
Reference		AP-42	AP-42	AP-42	
Formaldehyde					
Emission Factor, lbs/MMBtu		7.35E-05	7.35E-05	7.35E-05	
Percent Control Efficiency		0.00E+00	0.00E+00	0.00E+00	
Estimated or Measured Emissions (lbs/hr)		4.78E-04	4.78E-04	4.85E-04	
Reference		AP-42	AP-42	AP-42	
Hexane					
Emission Factor, lbs/MMBtu		1.76E-03	1.76E-03	1.76E-03	
Percent Control Efficiency		0.00E+00	0.00E+00	0.00E+00	
Estimated or Measured Emissions (lbs/hr)		1.15E-02	1.15E-02	1.16E-02	
Reference		AP-42	AP-42	AP-42	
Toluene					
Emission Factor, lbs/MMBtu		3.33E-06	3.33E-06	3.33E-06	
Percent Control Efficiency		0.00E+00	0.00E+00	0.00E+00	
Estimated or Measured Emissions (lbs/hr)		2.17E-05	2.17E-05	2.20E-05	
Reference		AP-42	AP-42	AP-42	
Arsenic					
Emission Factor, lbs/MMBtu		1.96E-07	1.96E-07	1.96E-07	
Percent Control Efficiency		0.00E+00	0.00E+00	0.00E+00	
Estimated or Measured Emissions (lbs/hr)		1.27E-06	1.27E-06	1.29E-06	
Reference		AP-42	AP-42	AP-42	
Beryllium					
Emission Factor, lbs/MMBtu		1.18E-08	1.18E-08	1.18E-08	
Percent Control Efficiency		0.00E+00	0.00E+00	0.00E+00	
Estimated or Measured Emissions (lbs/hr)		7.65E-08	7.65E-08	7.76E-08	
Reference		AP-42	AP-42	AP-42	

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process A	Process A	Process A	Process A	Process A
Stack Description	7020	7101	7102	7019	7001
Cadmium					
Emission Factor, lbs/MMBtu		1.08E-06	1.08E-06	1.08E-06	
Percent Control Efficiency		0.00E+00	0.00E+00	0.00E+00	
Estimated or Measured Emissions (lbs/hr)		7.01E-06	7.01E-06	7.12E-06	
Reference		AP-42	AP-42	AP-42	
Chromium					
Emission Factor, lbs/MMBtu		1.37E-06	1.37E-06	1.37E-06	
Percent Control Efficiency		0.00E+00	0.00E+00	0.00E+00	
Estimated or Measured Emissions (lbs/hr)		8.92E-06	8.92E-06	9.06E-06	
Reference		AP-42	AP-42	AP-42	
Cobalt					
Emission Factor, lbs/MMBtu		8.24E-08	8.24E-08	8.24E-08	
Percent Control Efficiency		0.00E+00	0.00E+00	0.00E+00	
Estimated or Measured Emissions (lbs/hr)		5.35E-07	5.35E-07	5.44E-07	
Reference		AP-42	AP-42	AP-42	
Manganese					
Emission Factor, lbs/MMBtu		3.73E-07	3.73E-07	3.73E-07	
Percent Control Efficiency		0.00E+00	0.00E+00	0.00E+00	
Estimated or Measured Emissions (lbs/hr)		2.42E-06	2.42E-06	2.46E-06	
Reference		AP-42	AP-42	AP-42	
Mercury					
Emission Factor, lbs/MMBtu		2.55E-07	2.55E-07	2.55E-07	
Percent Control Efficiency		0.00E+00	0.00E+00	0.00E+00	
Estimated or Measured Emissions (lbs/hr)		1.66E-06	1.66E-06	1.68E-06	
Reference		AP-42	AP-42	AP-42	
Nickel					
Emission Factor, lbs/MMBtu		2.06E-06	2.06E-06	2.06E-06	
Percent Control Efficiency		0.00E+00	0.00E+00	0.00E+00	
Estimated or Measured Emissions (lbs/hr)		1.34E-05	1.34E-05	1.36E-05	
Reference		AP-42	AP-42	AP-42	
Selenium					
Emission Factor, lbs/MMBtu		2.35E-08	2.35E-08	2.35E-08	
Percent Control Efficiency		0.00E+00	0.00E+00	0.00E+00	
Estimated or Measured Emissions (lbs/hr)		1.53E-07	1.53E-07	1.55E-07	
Reference		AP-42	AP-42	AP-42	

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process A	Process A	Process B	Process B	Process B
Stack Description	7027	7006	5034	5037	4000

DEQ Use Only

DEQ Plant ID Code					
DEQ Process Code					
DEQ Stack ID Code					
DEQ Building Code					
Primary SCC					
Secondary SCC					
DEQ Segment Code					

Part A: General Information

Process Code or Description	Process A	Process A	Process B	Process B	Process B
Stack Description	7027	7006	5034	5037	4000
Building Description	See Plot Plan	See Plot Plan	See Plot Plan	See Plot Plan	See Plot Plan
Manufacturer	Custom	Custom	Custom	Custom	Custom
Model	-	-	-	-	-
Date Installed	1965	1965	1993	1993	1997
Last Date Modified					

Processing Data

Input #1	Material Description	cooked food	cooked food	cooked food	cooked food	cooked food
	Maximum Rate (1000 lbs/hour)	0	0	0	0	0
	Actual Rate (1000 lbs/hour)	0	0	0	0	0
Input #2	Material Description					
	Maximum Rate (MMBtu/hr)					
	Actual Rate (1000 lbs/hour)					
Output	Material Description	dried food	dried food	dried food	dried food	dried food
	Maximum Rate (1000 lbs/hour)	5.1	40.8	17	17	4
	Actual Rate (1000 lbs/hour)	5.1	40.8	17	17	4

Potential HAPs in Process Stream

HAP Description		None	None	None	None	None

Part B: Operating Data

Percent Fuel Consumption:	Dec-Feb					
	Mar-May					
	Jun-Aug					
	Sep-Nov					
Operating Schedule:	Hours/day	24	24	24	24	24
	Days/week	7	7	7	7	7
	Weeks/year	52	52	52	52	52

Pollution Control Equipment

Type	None	None	None	None	None
Type Code	000	000	000	000	000

Ventilation and Building/Area Data

Enclosed (Y/N)	Y	Y	Y	Y	Y
Hood type					
Minimum flow (acfm)					
Percent Capture Efficiency					
Building height (ft)	70	70	70	70	70
Building /area length (ft)	500	500	500	500	500
Building/area width (ft)	220	220	220	220	220
Ground elevation (ft)	4863	4863	4863	4863	4863
UTM x coordinate (km)	437	437	437	437	437
UTM y coordinate (km)	4854	4854	4854	4854	4854
Stack type	02	02	02	02	02
Stack height from ground level (ft)	68	66	68	68	51
Stack exit diameter (ft) (as modeled)	1.17	0.90	0.72	2.21	2.79
Stack exit gas flowrate (acfm) (as modeled)	0	0	0	0	0
Stack exit temperature (F)	85	90	130	150	140

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process A	Process A	Process B	Process B	Process B
Stack Description	7027	7008	5034	5037	4008
Air Pollutant Emissions					
PM: Emission Factor, lbs/000 lbs	0.015	0.005	0.003	0.101	0.503
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00	0.00	0.00	0.00	0.00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
PM10: Emission Factor, lbs/000 lbs	0.008	0.003	0.001	0.076	0.430
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00	0.00	0.00	0.00	0.00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
SO2: Emission Factor - process operation, lbs/000 lbs	0.0000	0.0000	0.0000	0.1100	0.0650
Emission Factor - fuel combustion, lbs/MMBtu					
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00	0.00	0.00	0.00	0.00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
CO: Emission Factor, lbs/MMBtu					
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.000	0.000	0.000	0.000	0.000
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
NOx: Emission Factor, lbs/MMBtu					
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.000	0.000	0.000	0.000	0.000
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
VOC Emission Factor, lbs/MMBtu					
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.000	0.000	0.000	0.000	0.000
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
Lead Emission Factor, lbs/MMBtu					
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process A	Process A	Process B	Process B	Process B
Stack Description	7027	7006	5034	5037	4000
Hazardous Air Pollutants					
POM (including naphthalene)					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Benzene					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Dichlorobenzene					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Formaldehyde					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Hexane					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Toluene					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Arsenic					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Beryllium					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process A	Process A	Process B	Process B	Process B
Stack Description	7027	7006	5034	5037	4008
Cadmium					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Chromium					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Cobalt					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Manganese					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Mercury					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Nickel					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Selenium					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process B	Process B	Process B	Process B	Process B
Stack Description	228	234	311	312	410/411

DEQ Use Only

DEQ Plant ID Code					
DEQ Process Code					
DEQ Stack ID Code					
DEQ Building Code					
Primary SCC					
Secondary SCC					
DEQ Segment Code					

Part A: General Information

Process Code or Description	Process B	Process B	Process B	Process B	Process B
Stack Description	228	234	311	312	410/411
Building Description	See Plot Plan	See Plot Plan	See Plot Plan	See Plot Plan	See Plot Plan
Manufacturer	Custom	Custom	Custom	Custom	Custom
Model	-	-	-	-	-
Date Installed	1999	1999	1965	1965	1965
Last Date Modified					

Processing Data

Input #1	Material Description	cooked food	cooked food	cooked food	cooked food	cooked food
	Maximum Rate (1000 lbs/hour)	0	0	0	0	0
	Actual Rate (1000 lbs/hour)	0	0	0	0	0
Input #2	Material Description	natural gas	natural gas			
	Maximum Rate (MMBtu/hr)	9.66	6.44			
	Actual Rate (1000 lbs/hour)	9.66	6.44			
Output	Material Description	dried food	dried food	dried food	dried food	dried food
	Maximum Rate (1000 lbs/hour)	4	4	1.5	1.5	1.5
	Actual Rate (1000 lbs/hour)	4	4	1.5	1.5	1.5

Potential HAPs in Process Stream

HAP Description		None	None	None	None	None

Part B: Operating Data

Percent Fuel Consumption:	Dec-Feb	25	25			
	Mar-May	25	25			
	Jun-Aug	25	25			
	Sep-Nov	25	25			
Operating Schedule:	Hours/day	24	24	24	24	24
	Days/week	7	7	7	7	7
	Weeks/year	52	52	52	52	52

Pollution Control Equipment

Type	None	None	None	None	None
Type Code	000	000	000	000	000

Ventilation and Building/Area Data

Enclosed (Y/N)	Y	Y	Y	Y	Y
Hood type					
Minimum flow (acfm)					
Percent Capture Efficiency					
Building height (ft)	70	70	70	70	70
Building /area length (ft)	500	500	500	500	500
Building/area width (ft)	220	220	220	220	220
Ground elevation (ft)	4863	4863	4863	4863	4863
UTM x coordinate (km)	437	437	437	437	437
UTM y coordinate (km)	4854	4854	4854	4854	4854
Stack type	02	02	02	02	02
Stack height from ground level (ft)	38	35	31	31	31
Stack exit diameter (ft) (as modeled)	4.21	3.84	2.94	2.94	3.61
Stack exit gas flowrate (acfm) (as modeled)	0	0	0	0	0
Stack exit temperature (F)	170	160	124	114	130

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process B	Process B	Process B	Process B	Process B
Stack Description	228	234	311	312	410/411
Air Pollutant Emissions					
PM: Emission Factor, lbs/000 lbs	0.320	0.092	0.228	0.228	0.458
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00	0.00	0.00	0.00	0.00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
PM10: Emission Factor, lbs/000 lbs	0.274	0.078	0.195	0.195	0.391
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00	0.00	0.00	0.00	0.00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
SO2: Emission Factor - process operation, lbs/000 lbs	0.0420	0.0120	0.0300	0.0300	0.0590
Emission Factor - fuel combustion, lbs/MMBtu	0.0024	0.0024			
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.02	0.02	0.00	0.00	0.00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
CO: Emission Factor, lbs/MMBtu	0.130	0.130			
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	1.256	0.837	0.000	0.000	0.000
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
NOx: Emission Factor, lbs/MMBtu	0.026	0.026			
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.246	0.164	0.000	0.000	0.000
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
VOC Emission Factor, lbs/MMBtu	0.005	0.005			
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.052	0.035	0.000	0.000	0.000
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
Lead Emission Factor, lbs/MMBtu	4.90E-07	4.90E-07			
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	4.74E-06	3.16E-06	0.00E+00	0.00E+00	0.00E+00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process B	Process B	Process B	Process B	Process B
Stack Description	228	234	311	312	410/411
Hazardous Air Pollutants					
POM (including naphthalene)					
Emission Factor, lbs/MMBtu	8.65E-08	8.65E-08			
Percent Control Efficiency	0	0			
Estimated or Measured Emissions (lbs/hr)	8.35E-07	5.57E-07			
Reference	AP-42	AP-42			
Benzene					
Emission Factor, lbs/MMBtu	2.06E-06	2.06E-06			
Percent Control Efficiency	0	0			
Estimated or Measured Emissions (lbs/hr)	1.99E-05	1.33E-05			
Reference	AP-42	AP-42			
Dichlorobenzene					
Emission Factor, lbs/MMBtu	1.18E-06	1.18E-06			
Percent Control Efficiency	0.00E+00	0.00E+00			
Estimated or Measured Emissions (lbs/hr)	1.14E-05	7.58E-06			
Reference	AP-42	AP-42			
Formaldehyde					
Emission Factor, lbs/MMBtu	7.35E-05	7.35E-05			
Percent Control Efficiency	0.00E+00	0.00E+00			
Estimated or Measured Emissions (lbs/hr)	7.10E-04	4.74E-04			
Reference	AP-42	AP-42			
Hexane					
Emission Factor, lbs/MMBtu	1.76E-03	1.76E-03			
Percent Control Efficiency	0.00E+00	0.00E+00			
Estimated or Measured Emissions (lbs/hr)	1.70E-02	1.14E-02			
Reference	AP-42	AP-42			
Toluene					
Emission Factor, lbs/MMBtu	3.33E-06	3.33E-06			
Percent Control Efficiency	0.00E+00	0.00E+00			
Estimated or Measured Emissions (lbs/hr)	3.22E-05	2.15E-05			
Reference	AP-42	AP-42			
Arsenic					
Emission Factor, lbs/MMBtu	1.96E-07	1.96E-07			
Percent Control Efficiency	0.00E+00	0.00E+00			
Estimated or Measured Emissions (lbs/hr)	1.89E-06	1.26E-06			
Reference	AP-42	AP-42			
Beryllium					
Emission Factor, lbs/MMBtu	1.18E-08	1.18E-08			
Percent Control Efficiency	0.00E+00	0.00E+00			
Estimated or Measured Emissions (lbs/hr)	1.14E-07	7.58E-08			
Reference	AP-42	AP-42			

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process B	Process B	Process B	Process B	Process B
Stack Description	228	234	311	312	410/411
Cadmium					
Emission Factor, lbs/MMBtu	1.08E-06	1.08E-06			
Percent Control Efficiency	0.00E+00	0.00E+00			
Estimated or Measured Emissions (lbs/hr)	1.04E-05	6.95E-06			
Reference	AP-42	AP-42			
Chromium					
Emission Factor, lbs/MMBtu	1.37E-06	1.37E-06			
Percent Control Efficiency	0.00E+00	0.00E+00			
Estimated or Measured Emissions (lbs/hr)	1.33E-05	8.84E-06			
Reference	AP-42	AP-42			
Cobalt					
Emission Factor, lbs/MMBtu	8.24E-08	8.24E-08			
Percent Control Efficiency	0.00E+00	0.00E+00			
Estimated or Measured Emissions (lbs/hr)	7.96E-07	5.30E-07			
Reference	AP-42	AP-42			
Manganese					
Emission Factor, lbs/MMBtu	3.73E-07	3.73E-07			
Percent Control Efficiency	0.00E+00	0.00E+00			
Estimated or Measured Emissions (lbs/hr)	3.60E-06	2.40E-06			
Reference	AP-42	AP-42			
Mercury					
Emission Factor, lbs/MMBtu	2.55E-07	2.55E-07			
Percent Control Efficiency	0.00E+00	0.00E+00			
Estimated or Measured Emissions (lbs/hr)	2.46E-06	1.64E-06			
Reference	AP-42	AP-42			
Nickel					
Emission Factor, lbs/MMBtu	2.06E-06	2.06E-06			
Percent Control Efficiency	0.00E+00	0.00E+00			
Estimated or Measured Emissions (lbs/hr)	1.99E-05	1.33E-05			
Reference	AP-42	AP-42			
Selenium					
Emission Factor, lbs/MMBtu	2.35E-08	2.35E-08			
Percent Control Efficiency	0.00E+00	0.00E+00			
Estimated or Measured Emissions (lbs/hr)	2.27E-07	1.52E-07			
Reference	AP-42	AP-42			

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process B	Process B	Process B	Process B	Process B
Stack Description	613/614	615/616	638	707	725

DEQ Use Only

DEQ Plant ID Code					
DEQ Process Code					
DEQ Stack ID Code					
DEQ Building Code					
Primary SCC					
Secondary SCC					
DEQ Segment Code					

Part A: General Information

Process Code or Description	Process B	Process B	Process B	Process B	Process B
Stack Description	613/614	615/616	638	707	725
Building Description	See Plot Plan	See Plot Plan	See Plot Plan	See Plot Plan	See Plot Plan
Manufacturer	Custom	Custom	Custom	Custom	Custom
Model	-	-	-	-	-
Date Installed	1976	1976	1976	1965?	1965?
Last Date Modified					

Processing Data

Input #1	Material Description	cooked food	cooked food	cooked food	cooked food	cooked food
	Maximum Rate (1000 lbs/hour)	0	0	0	0	0
	Actual Rate (1000 lbs/hour)	0	0	0	0	0
Input #2	Material Description					
	Maximum Rate (MMBtu/hr)					
	Actual Rate (1000 lbs/hour)					
Output	Material Description	dried food	dried food	dried food	dried food	dried food
	Maximum Rate (1000 lbs/hour)	2.8	2.8	2.8	30.4	30.4
	Actual Rate (1000 lbs/hour)	2.8	2.8	2.8	30.4	30.4

Potential HAPs in Process Stream

HAP Description		None	None	None		

Part B: Operating Data

Percent Fuel Consumption:	Dec-Feb					
	Mar-May					
	Jun-Aug					
	Sep-Nov					
Operating Schedule:	Hours/day	24	24	24	24	24
	Days/week	7	7	7	7	7
	Weeks/year	52	52	52	52	52

Pollution Control Equipment

Type	None	None	None		
Type Code	000	000	000	000	000

Ventilation and Building/Area Data

Enclosed (Y/N)	Y	Y	Y		
Hood type					
Minimum flow (acfm)					
Percent Capture Efficiency					
Building height (ft)	70	70	70	70	70
Building /area length (ft)	500	500	500	500	500
Building/area width (ft)	220	220	220	220	220
Ground elevation (ft)	4863	4863	4863	4863	4863
UTM x coordinate (km)	437	437	437	437	437
UTM y coordinate (km)	4854	4854	4854	4854	4854
Stack type	02	02	02	04	04
Stack height from ground level (ft)	28	26	29	14	17
Stack exit diameter (ft) (as modeled)	2.06	2.16	1.38	0.70	0.40
Stack exit gas flowrate (acfm) (as modeled)	0	0	0	0	0
Stack exit temperature (F)	140	192	162	90	90

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process B	Process B	Process B	Process B	Process B
Stack Description	613/614	615/616	638	707	725
Air Pollutant Emissions					
PM: Emission Factor, lbs/000 lbs	0.457	0.357	0.101	0.000	0.002
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00	0.00	0.00	0.00	0.00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
PM10: Emission Factor, lbs/000 lbs	0.391	0.305	0.086	0.000	0.002
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00	0.00	0.00	0.00	0.00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
SO2: Emission Factor - process operation, lbs/000 lbs	0.0600	0.0460	0.0130	0.0000	0.0000
Emission Factor - fuel combustion, lbs/MMBtu					
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00	0.00	0.00	0.00	0.00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
CO: Emission Factor, lbs/MMBtu					
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.000	0.000	0.000	0.000	0.000
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
NOx: Emission Factor, lbs/MMBtu					
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.000	0.000	0.000	0.000	0.000
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
VOC Emission Factor, lbs/MMBtu					
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.000	0.000	0.000	0.000	0.000
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
Lead Emission Factor, lbs/MMBtu					
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process B	Process B	Process B	Process B	Process B
Stack Description	613/614	615/616	638	707	725
Hazardous Air Pollutants					
POM (including naphthalene)					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Benzene					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Dichlorobenzene					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Formaldehyde					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Hexane					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Toluene					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Arsenic					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Beryllium					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process B	Process B	Process B	Process B	Process B
Stack Description	613/614	615/616	638	707	725
Cadmium					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Chromium					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Cobalt					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Manganese					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Mercury					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Nickel					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Selenium					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process B	Process B	Process B	Process B	Process B
Stack Description	8	5001	5000	432	322

DEQ Use Only

DEQ Plant ID Code					
DEQ Process Code					
DEQ Stack ID Code					
DEQ Building Code					
Primary SCC					
Secondary SCC					
DEQ Segment Code					

Part A: General Information

Process Code or Description	Process B	Process B	Process B	Process B	Process B
Stack Description	8	5001	5000	432	322
Building Description	See Plot Plan	See Plot Plan	See Plot Plan	See Plot Plan	See Plot Plan
Manufacturer	Custom	Custom	Custom	Custom	Custom
Model	-	-	-	-	-
Date Installed	1965?	1965?	1993	1983	1972
Last Date Modified					

Processing Data

Input #1	Material Description	cooked food	cooked and rehydrated food	cooked and rehydrated food	cooked and rehydrated food	cooked and rehydrated food
	Maximum Rate (1000 lbs/hour)	0	0	0	0	0
	Actual Rate (1000 lbs/hour)	0	0	0	0	0
Input #2	Material Description					
	Maximum Rate (MMBtu/hr)					
	Actual Rate (1000 lbs/hour)					
Output	Material Description	dried food	dried food	dried food	dried food	dried food
	Maximum Rate (1000 lbs/hour)	30.4	30.4	30.4	30.4	30.4
	Actual Rate (1000 lbs/hour)	30.4	30.4	30.4	30.4	30.4

Potential HAPs in Process Stream

HAP Description						

Part B: Operating Data

Percent Fuel Consumption:	Dec-Feb					
	Mar-May					
	Jun-Aug					
	Sep-Nov					
Operating Schedule:	Hours/day	24	24	24	24	24
	Days/week	7	7	7	7	7
	Weeks/year	52	52	52	52	52

Pollution Control Equipment

Type					
Type Code	000	000	000	000	000

Ventilation and Building/Area Data

Enclosed (Y/N)					
Hood type					
Minimum flow (acfm)					
Percent Capture Efficiency					
Building height (ft)	70	70	70	70	70
Building /area length (ft)	500	500	500	500	500
Building/area width (ft)	220	220	220	220	220
Ground elevation (ft)	4863	4863	4863	4863	4863
UTM x coordinate (km)	437	437	437	437	#N/A
UTM y coordinate (km)	4854	4854	4854	4854	#N/A
Stack type	04	02	04	04	#N/A
Stack height from ground level (ft)	22	68	27	23	#N/A
Stack exit diameter (ft) (as modeled)	1.33	0.42	0.72	0.50	#N/A
Stack exit gas flowrate (acfm) (as modeled)	0	0	0	0	#N/A
Stack exit temperature (F)	81	76	80	80	#N/A

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process B	Process B	Process B	Process B	Process B
Stack Description	8	5001	5008	432	322
Air Pollutant Emissions					
PM: Emission Factor, lbs/000 lbs	0.002	0.016	0.002	0.002	0.016
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00	0.00	0.00	0.00	0.00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
PM10: Emission Factor, lbs/000 lbs	0.002	0.008	0.002	0.002	0.008
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00	0.00	0.00	0.00	0.00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
SO2: Emission Factor - process operation, lbs/000 lbs	0.0000	0.0000	0.0000	0.0000	0.0000
Emission Factor - fuel combustion, lbs/MMBtu					
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00	0.00	0.00	0.00	0.00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
CO: Emission Factor, lbs/MMBtu					
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.000	0.000	0.000	0.000	0.000
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
NOx: Emission Factor, lbs/MMBtu					
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.000	0.000	0.000	0.000	0.000
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
VOC Emission Factor, lbs/MMBtu					
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.000	0.000	0.000	0.000	0.000
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
Lead Emission Factor, lbs/MMBtu					
Percent Control Efficiency	0	0	0	0	0
Estimated or Measured Emissions (lbs/hr)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Allowable emissions (lbs/hr)					
Allowable emissions (tons/yr)					
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process B	Process B	Process B	Process B	Process B
Stack Description	8	5001	5000	432	322
Hazardous Air Pollutants					
POM (including naphthalene)					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Benzene					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Dichlorobenzene					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Formaldehyde					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Hexane					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Toluene					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Arsenic					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Beryllium					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process B	Process B	Process B	Process B	Process B
Stack Description	8	5001	5009	432	322
Cadmium					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Chromium					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Cobalt					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Manganese					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Mercury					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Nickel					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					
Selenium					
Emission Factor, lbs/MMBtu					
Percent Control Efficiency					
Estimated or Measured Emissions (lbs/hr)					
Reference					

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	**Process B**
Stack Description	**572**

DEQ Use Only

DEQ Plant ID Code	
DEQ Process Code	
DEQ Stack ID Code	
DEQ Building Code	
Primary SCC	
Secondary SCC	
DEQ Segment Code	

Part A: General Information

Process Code or Description	Process B
Stack Description	572
Building Description	See Plot Plan
Manufacturer	Custom
Model	-
Date Installed	1997
Last Date Modified	

Processing Data

Input #1	Material Description	cooked and rehydrated food
	Maximum Rate (1000 lbs/hour)	0
	Actual Rate (1000 lbs/hour)	0
Input #2	Material Description	
	Maximum Rate (MMBtu/hr)	
	Actual Rate (1000 lbs/hour)	
Output	Material Description	dried food
	Maximum Rate (1000 lbs/hour)	5
	Actual Rate (1000 lbs/hour)	5

Potential HAPs in Process Stream

HAP Description		

Part B: Operating Data

Percent Fuel Consumption:	Dec-Feb	
	Mar-May	
	Jun-Aug	
	Sep-Nov	
Operating Schedule:	Hours/day	24
	Days/week	7
	Weeks/year	52

Pollution Control Equipment

Type	
Type Code	000

Ventilation and Building/Area Data

Enclosed (Y/N)	
Hood type	
Minimum flow (acfm)	
Percent Capture Efficiency	
Building height (ft)	70
Building /area length (ft)	500
Building/area width (ft)	220
Ground elevation (ft)	4863
UTM x coordinate (km)	437
UTM y coordinate (km)	4854
Stack type	02
Stack height from ground level (ft)	16
Stack exit diameter (ft) (as modeled)	0.54
Stack exit gas flowrate (acfm) (as modeled)	0
Stack exit temperature (F)	90

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	**Process B**
Stack Description	**572**
Air Pollutant Emissions	
PM: Emission Factor, lbs/000 lbs	0.150
Percent Control Efficiency	0
Estimated or Measured Emissions (lbs/hr)	0.00
Allowable emissions (lbs/hr)	
Allowable emissions (tons/yr)	
Reference	Appendix C
PM10: Emission Factor, lbs/000 lbs	0.038
Percent Control Efficiency	0
Estimated or Measured Emissions (lbs/hr)	0.00
Allowable emissions (lbs/hr)	
Allowable emissions (tons/yr)	
Reference	Appendix C
SO2: Emission Factor - process operation, lbs/000 lbs	0.0000
Emission Factor - fuel combustion, lbs/MMBtu	
Percent Control Efficiency	0
Estimated or Measured Emissions (lbs/hr)	0.00
Allowable emissions (lbs/hr)	
Allowable emissions (tons/yr)	
Reference	Appendix C
CO: Emission Factor, lbs/MMBtu	
Percent Control Efficiency	0
Estimated or Measured Emissions (lbs/hr)	0.000
Allowable emissions (lbs/hr)	
Allowable emissions (tons/yr)	
Reference	Appendix C
NOx: Emission Factor, lbs/MMBtu	
Percent Control Efficiency	0
Estimated or Measured Emissions (lbs/hr)	0.000
Allowable emissions (lbs/hr)	
Allowable emissions (tons/yr)	
Reference	Appendix C
VOC Emission Factor, lbs/MMBtu	
Percent Control Efficiency	0
Estimated or Measured Emissions (lbs/hr)	0.000
Allowable emissions (lbs/hr)	
Allowable emissions (tons/yr)	
Reference	Appendix C
Lead Emission Factor, lbs/MMBtu	
Percent Control Efficiency	0
Estimated or Measured Emissions (lbs/hr)	0.00E+00
Allowable emissions (lbs/hr)	
Allowable emissions (tons/yr)	
Reference	Appendix C

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process B
Stack Description	572

Hazardous Air Pollutants

POM (including naphthalene)	
Emission Factor, lbs/MMBtu	
Percent Control Efficiency	
Estimated or Measured Emissions (lbs/hr)	
Reference	
Benzene	
Emission Factor, lbs/MMBtu	
Percent Control Efficiency	
Estimated or Measured Emissions (lbs/hr)	
Reference	
Dichlorobenzene	
Emission Factor, lbs/MMBtu	
Percent Control Efficiency	
Estimated or Measured Emissions (lbs/hr)	
Reference	
Formaldehyde	
Emission Factor, lbs/MMBtu	
Percent Control Efficiency	
Estimated or Measured Emissions (lbs/hr)	
Reference	
Hexane	
Emission Factor, lbs/MMBtu	
Percent Control Efficiency	
Estimated or Measured Emissions (lbs/hr)	
Reference	
Toluene	
Emission Factor, lbs/MMBtu	
Percent Control Efficiency	
Estimated or Measured Emissions (lbs/hr)	
Reference	
Arsenic	
Emission Factor, lbs/MMBtu	
Percent Control Efficiency	
Estimated or Measured Emissions (lbs/hr)	
Reference	
Beryllium	
Emission Factor, lbs/MMBtu	
Percent Control Efficiency	
Estimated or Measured Emissions (lbs/hr)	
Reference	

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

Process Code or Description	Process B
Stack Description	572
Cadmium	
Emission Factor, lbs/MMBtu	
Percent Control Efficiency	
Estimated or Measured Emissions (lbs/hr)	
Reference	
Chromium	
Emission Factor, lbs/MMBtu	
Percent Control Efficiency	
Estimated or Measured Emissions (lbs/hr)	
Reference	
Cobalt	
Emission Factor, lbs/MMBtu	
Percent Control Efficiency	
Estimated or Measured Emissions (lbs/hr)	
Reference	
Manganese	
Emission Factor, lbs/MMBtu	
Percent Control Efficiency	
Estimated or Measured Emissions (lbs/hr)	
Reference	
Mercury	
Emission Factor, lbs/MMBtu	
Percent Control Efficiency	
Estimated or Measured Emissions (lbs/hr)	
Reference	
Nickel	
Emission Factor, lbs/MMBtu	
Percent Control Efficiency	
Estimated or Measured Emissions (lbs/hr)	
Reference	
Selenium	
Emission Factor, lbs/MMBtu	
Percent Control Efficiency	
Estimated or Measured Emissions (lbs/hr)	
Reference	

SECTION 7: SOLID MATERIAL TRANSPORT, HANDLING, AND STORAGE

DEQ Use Only						
DEQ Plant ID Code						
DEQ Process Code						
DEQ Stack ID Code						
DEQ Building Code						
Primary SCC						
Secondary SCC						
DEQ Segment Code						
PART A: General Information						
Process Code or Description	Process B	Process B	Process B	Process B	#N/A	Process B
Stack Description	8	5001	5000	432	322	572
Building Description	See Plot Plan	See Plot Plan	See Plot Plan	See Plot Plan	See Plot Plan	See Plot Plan
Date Installed	1958	1961	1961	1961	1961	1958
Last Date Modified						
Material Description	dehydrated food	dehydrated food	dehydrated food	dehydrated food	dehydrated food	dehydrated food
Material Transfer Rates						
Maximum Hourly Transfer Rate (1000 lbs/hour)	30.40	30.40	30.40	0	#N/A	0
Normal Hourly Transfer Rate (1000 lbs/hour)	30.40	30.40	30.40	0	#N/A	0
Normal Annual Transfer Rate (1000 lbs/year)	53,261	53,261	53,261	-	#N/A	-
Unit of Measure						
Belt Conveyor/Vehicle Transfer						
Pneumatic Conveyor Transfers						
Moisture content, wt %	8	8	8	8	8	8
Primary Separtor Type	cyclone	cyclone	cyclone	cyclone	cyclone	cyclone
Separator Efficiency	>99%	>99%	>99%	>99%	>99%	>99%
Material Storage Data						
Storage Type:	Enclosed tank. No stack	Enclosed tank. No stack	Enclosed tank. No stack	Enclosed tank. No stack	Enclosed tank. No stack	Enclosed tank. No stack
Material Data						
HAP Description	None	None	None	None	None	None
PART B: Operating Data						
Percent Fuel Consumption: Dec-Feb						
Mar-May						
Jun-Aug						
Sep-Nov						
Operating Schedule: Hours/day	24	24	24	24	24	24
Days/week	7	7	7	7	7	7
Weeks/year	52	52	52	52	52	52
Pollution Control Equipment						
Type	None	None	None	None	None	None
Type Code	0000	0001	0002	0003	0004	0005
Ventilation and Building/Area Data						
Enclosed (Y/N)	Y	Y	Y	Y	Y	Y
Hood type						
Minimum flow (acfm)						
Percent Capture Efficiency						
Building height (ft)	70	66	66	66	66	66
Building /area length (ft)	500	450	450	450	450	450
Building/area width (ft)	220	350	350	350	350	350
Ground elevation (ft)	4863	4622	4622	4622	4622	4622
UTM x coordinate (km)	437	437	437	437	437	437
UTM y coordinate (km)	4854	4854	4854	4854	4854	4854
Stack type	04	02	04	04	04	02
Stack height from ground level (ft)	22	68	27	23	10	16
Stack exit diameter (ft) (as modeled)	1.33	0.42	0.72	0.50	0.50	0.54
Stack exit gas flowrate (acfm) (as modeled)	0	0	0	0	0	0
Stack exit temperature (F)	81	76	80	80	180	90
Air Pollutant Emissions						
PM: Emission Factor, lb/1000 lbs material transferred	0.002	0.016	0.002	0.002	#N/A	0.150
Percent Control Efficiency						
Estimated Emissions (lbs/hr)	0.05	0.49	0.05	0.002	#N/A	0.150
Allowable emissions (lbs/hr)						
Allowable emissions (tons/yr)						
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C
PM10: Emission Factor, lb/1000 lbs material transferred	0.002	0.008	0.002			
Percent Control Efficiency						
Estimated Emissions (lbs/hr)	0.05	0.24	0.05	0.002	#N/A	0.038
Allowable emissions (lbs/hr)						
Allowable emissions (tons/yr)						
Reference	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C	Appendix C

SECTION 8: FUGITIVE ROAD DUST SOURCES

DEQ Use Only													
DEQ Plant ID Code													
DEQ Process Code													
DEQ Stack ID Code													
DEQ Building Code													
Primary SCC													
Secondary SCC													
DEQ Segment Code													
General Information													
Road Description	A	B	C	D	E	F	G	H	I	J	K	L1	L2
Length (ft)	295	295	298	394	587	525	627	578	815	1342	1671	1572	2730
Width (ft)	40	217	143	109	131	40	55	84	38	20	20	20	20
Paved (Y/N?)	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N
Beginning Coordinates UTM-X (km)	437	437	437	437	437	437	437	437	437	437	437	437	437
UTM-Y (km)	4854	4854	4854	4854	4854	4854	4854	4854	4854	4854	4854	4854	4854
Ending Coordinates UTM-X (km)	437	437	437	437	437	437	437	437	437	437	437	437	437
UTM-Y (km)	4854	4854	4854	4854	4854	4854	4854	4854	4854	4854	4854	4854	4854
Data For All Roads - Paved and Unpaved													
Vehicle Description	cars, trucks, 18 & 10 Wheelers	cars, trucks, 18 & 10 Wheelers	cars, trucks, 18 & 10 Wheelers	cars, trucks, 18 & 10 Wheelers	10 Wheelers	10 Wheelers	18 & 14 Wheelers	18 & 14 Wheelers	10 Wheelers	pickup trucks, 10 Wheelers	pickup trucks, 10 Wheelers	pickup trucks, 10 Wheelers	pickup trucks, 10 Wheelers
Number of Round Trips per Day	338	345	7	281	200	38	47	35	10	7	18	7	7
Vehicle Miles Traveled per Day	37.80	38.59	0.79	41.91	44.44	7.56	11.16	7.66	3.09	3.56	11.40	4.17	7.24
Number of Days per Year Used	varies	varies	varies	varies	varies	varies	varies	varies	varies	varies	varies	varies	varies
Number of Round Trips per Year	89,731	91,656	1,925	75,151	52,000	11,035	10,820	7,700	3,650	780	1,295	780	780
Vehicle Miles Traveled per Year	10,036	10,251	217	11,207	11,555	2,194	2,568	1,686	1,127	396	820	464	806
Average Vehicle Speed (mph)	10	10	10	10	10	10	10	10	10	10	10	10	10
Surface Silt Content (% weight or g/m2)	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	6.4	6.4	6.4	6.4	6.4
Vehicle Empty Weight (tons)	varies	varies	varies	varies	varies	varies	varies	varies	varies	varies	varies	varies	varies
Vehicle Full Weight (tons)	varies	varies	varies	varies	varies	varies	varies	varies	varies	varies	varies	varies	varies
Mean Vehicle Weight (tons)	7.3	7.8	28.4	8.7	1.0	28.1	26.4	25.1	24.0	7.1	14.4	7.1	7.1
Unpaved Roads Data													
Mean Number of Wheels per Vehicle	6	6	13	7	4	13	12	12	10	8	9	8	8
Number of Days >0.01 inches of precipitation	90	90	90	90	90	90	90	90	90	90	90	90	90
Paved Roads Data													
Number of Lanes	3	3	3	3	3	3	3	3	3	3	3	3	3
Industrial Augmentation Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Dust Loading (lbs/mile)	74.3	82.6	11.8	80.5	2.2	62.9	70.6	48.9	342.1	130.0	476.4	130.0	130.0
Road Dust Chemical Data													
HAP Description													
HAP CAS Number													
HAP Fraction in Road Dust, by Weight													
Operating Data													
Percent Fuel Consumption: Dec-Feb	25	25	25	25	25	25	25	25	25	25	25	25	25
Mar-May	25	25	25	25	25	25	25	25	25	25	25	25	25
Jun-Aug	25	25	25	25	25	25	25	25	25	25	25	25	25
Sep-Nov	25	25	25	25	25	25	25	25	25	25	25	25	25
Operating Schedule: Hours/day	24	24	24	24	24	24	24	24	24	24	24	24	24
Days/week	7	7	7	7	7	7	7	7	7	7	7	7	7
Weeks/year	52	52	52	52	52	52	52	52	52	52	52	52	52
Fugitive Dust Control Data													
Control Description	None	None	None	None	None	None	None	None	None	None	None	None	None
Control Code													
Minimum Daily Application of Control													
Maximum Daily Application of Control													
Average Annual Application of Control													
Amount Applied (units/application)													
Air Pollutant Emissions													
PM: Emission Factor (lbs/VMT)	0.11	0.12	0.84	0.14	0.01	0.83	0.75	0.70	17.11	9.29	13.23	9.29	9.29
Percent Control Efficiency													
Estimated Emissions (lbs/hr), dry days	0.17	0.19	0.03	0.25	0.01	0.26	0.35	0.22	2.20	1.38	6.28	1.61	2.80
Estimated Emissions (lbs/hr), annual avg	0.12	0.13	0.02	0.17	0.01	0.19	0.21	0.13	1.66	0.32	0.93	0.37	0.64
Allowable emissions (lbs/hr)													
Allowable emissions (tons/yr)													
Reference	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2

SECTION 8: FUGITIVE ROAD DUST SOURCES

General Information													
Road Description	A	B	C	D	E	F	G	H	I	J	K	L1	L2
PM10: Emission Factor (lbs/VMT)	0.02	0.02	0.16	0.03	0.00	0.16	0.15	0.14	3.61	2.22	2.94	2.22	2.22
Percent Control Efficiency													
Estimated Emissions (lbs/hr), dry days	0.034	0.038	0.005	0.049	0.002	0.051	0.068	0.044	0.465	0.328	1.397	0.385	0.668
Estimated Emissions (lbs/hr), annual avg	0.023	0.026	0.004	0.034	0.001	0.038	0.040	0.025	0.350	0.076	0.207	0.088	0.154
Allowable emissions (lbs/hr)													
Allowable emissions (tons/yr)													
Reference	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2

SECTION 8: FUGITIVE ROAD DUST SOURCES

DEQ Use Only									
DEQ Plant ID Code									
DEQ Process Code									
DEQ Stack ID Code									
DEQ Building Code									
Primary SCC									
Secondary SCC									
DEQ Segment Code									
General Information									
Road Description	L3	L4	L5	M1	M2	M3	M4	N1	N2
Length (ft)	1306	981	1214	500	2447	1258	826	518	574
Width (ft)	20	20	20	20	20	20	20	20	20
Paved (Y/N?)	N	N	N	N	N	N	N	N	N
Beginning Coordinates UTM-X (km)	437	437	437	437	437	437	437	437	437
UTM-Y (km)	4854	4854	4854	4854	4854	4854	4854	4854	4854
Ending Coordinates UTM-X (km)	437	437	437	437	437	437	437	437	437
UTM-Y (km)	4854	4854	4854	4854	4854	4854	4854	4854	4854
Data For All Roads - Paved and Unpaved									
Vehicle Description	pickup trucks, 10 Wheelers	pickup trucks, 10 Wheelers	pickup trucks, 10 Wheelers	pickup trucks, 10 Wheelers	pickup trucks, 10 Wheelers	pickup trucks, 10 Wheelers	pickup trucks, 10 Wheelers	pickup trucks, 10 Wheelers	pickup trucks, 10 Wheelers
Number of Round Trips per Day	7	7	7	7	7	7	7	7	7
Vehicle Miles Traveled per Day	3.46	2.60	3.22	1.32	6.49	3.34	2.19	1.37	1.52
Number of Days per Year Used	varies	varies	varies	varies	varies	varies	varies	varies	varies
Number of Round Trips per Year	780	780	780	780	780	780	780	780	780
Vehicle Miles Traveled per Year	386	290	359	148	723	372	244	153	170
Average Vehicle Speed (mph)	10	10	10	10	10	10	10	10	10
Surface Silt Content (% weight or g/m2)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Vehicle Empty Weight (tons)	varies	varies	varies	varies	varies	varies	varies	varies	varies
Vehicle Full Weight (tons)	varies	varies	varies	varies	varies	varies	varies	varies	varies
Mean Vehicle Weight (tons)	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
Unpaved Roads Data									
Mean Number of Wheels per Vehicle	8	8	8	8	8	8	8	8	8
Number of Days >0.01 inches of precipitation	90	90	90	90	90	90	90	90	90
Paved Roads Data									
Number of Lanes	3	3	3	3	3	3	3	3	3
Industrial Augmentation Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Dust Loading (lbs/mile)	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
Road Dust Chemical Data									
HAP Description									
HAP CAS Number									
HAP Fraction in Road Dust, by Weight									
Operating Data									
Percent Fuel Consumption: Dec-Feb	25	25	25	25	25	25	25	25	25
Mar-May	25	25	25	25	25	25	25	25	25
Jun-Aug	25	25	25	25	25	25	25	25	25
Sep-Nov	25	25	25	25	25	25	25	25	25
Operating Schedule: Hours/day	24	24	24	24	24	24	24	24	24
Days/week	7	7	7	7	7	7	7	7	7
Weeks/year	52	52	52	52	52	52	52	52	52
Fugitive Dust Control Data									
Control Description	None	None	None	None	None	None	None	None	None
Control Code									
Minimum Daily Application of Control									
Maximum Daily Application of Control									
Average Annual Application of Control									
Amount Applied (units/application)									
Air Pollutant Emissions									
PM: Emission Factor (lbs/VMT)	9.29	9.29	9.29	9.29	9.29	9.29	9.29	9.29	9.29
Percent Control Efficiency									
Estimated Emissions (lbs/hr), dry days	1.34	1.01	1.24	0.51	2.51	1.29	0.85	0.53	0.59
Estimated Emissions (lbs/hr), annual avg	0.31	0.23	0.29	0.12	0.58	0.30	0.19	0.12	0.14
Allowable emissions (lbs/hr)									
Allowable emissions (tons/yr)									
Reference	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2

SECTION 8: FUGITIVE ROAD DUST SOURCES

General Information									
Road Description	L3	L4	L5	M1	M2	M3	M4	N1	N2
PM10: Emission Factor (lbs/VMT)	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22
Percent Control Efficiency									
Estimated Emissions (lbs/hr), dry days	0.320	0.240	0.297	0.122	0.599	0.308	0.202	0.127	0.141
Estimated Emissions (lbs/hr), annual avg	0.074	0.055	0.068	0.028	0.138	0.071	0.046	0.029	0.032
Allowable emissions (lbs/hr)									
Allowable emissions (tons/yr)									
Reference	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2	AP-42, Sec 13.2

APPENDIX C

PLANT EMISSIONS INVENTORY

Table C-1. Potential Sources of Air Pollutant Emissions

Production Process	Stack Identification Code	POTENTIAL EMISSION GENERATING ACTIVITY							
		CO	NOx	SO2	TSP	PM-10	VOC	Lead	Toxic Air Pollutants
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	Wind erosion and material handling	Evaporation of volatile organic compounds	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	Entrainment of particulates in unit process exhaust	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	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	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	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	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	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	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	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	None	None	None
Process A	7027	None	None	None	Entrainment of particulates in unit process exhaust	Entrainment of particulates in unit process exhaust	None	None	None
Process A	7006	None	None	None	Entrainment of particulates in unit process exhaust	Entrainment of particulates in unit process exhaust	None	None	None
Process B	5034	None	None	None	Entrainment of particulates in unit process exhaust	Entrainment of particulates in unit process exhaust	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	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	None	None	None

Table C-1. Potential Sources of Air Pollutant Emissions

Production Process	Stack Identification Code	POTENTIAL EMISSION GENERATING ACTIVITY							
		CO	NOx	SO2	TSP	PM-10	VOC	Lead	Toxic Air Pollutants
Process B	4000	None	None	Conversion of sulfite to SO3	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	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	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	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	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	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	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	None	None	None
Process B	312	None	None	Conversion of sulfite to SO3	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	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	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	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	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	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	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	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	Entrainment of particulates in unit process exhaust and volatilization of condensible compounds	None	None	None
Process B	707	None	None	None	Entrainment of particulates in unit process exhaust	Entrainment of particulates in unit process exhaust	None	None	None
Process B	725	None	None	None	Entrainment of particulates in unit process exhaust	Entrainment of particulates in unit process exhaust	None	None	None

Table C-1. Potential Sources of Air Pollutant Emissions

Production Process	Stack Identification Code	POTENTIAL EMISSION GENERATING ACTIVITY							
		CO	NOx	SO2	TSP	PM-10	VOC	Lead	Toxic Air Pollutants
Process B	8	None	None	None	Entrainment of particulates in unit process exhaust	Entrainment of particulates in unit process exhaust	None	None	None
Process B	5001	None	None	None	Entrainment of particulates in unit process exhaust	Entrainment of particulates in unit process exhaust	None	None	None
Process B	5000	None	None	None	Entrainment of particulates in unit process exhaust	Entrainment of particulates in unit process exhaust	None	None	None
Process B	432	None	None	None	Entrainment of particulates in unit process exhaust	Entrainment of particulates in unit process exhaust	None	None	None
Process B	322	None	None	None	Entrainment of particulates in unit process exhaust	Entrainment of particulates in unit process exhaust	None	None	None
Process B	572	None	None	None	Entrainment of particulates in unit process exhaust	Entrainment of particulates in unit process exhaust	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	Vehicle Traffic	None	None	None

Table C-2. Carbon Monoxide Emission Factors

Production Process	Stack Identification Code	Emission Factor	Units	Basis for Factor
Boilers	Kipper Boiler	0.927	lb CO/000 lbs steam	From 1994 Source Emission Evaluation Report. Emission factor is for 100% firing with wood waste.
Boilers	Boiler 1	0.08	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.
Boilers	Boiler 2	0.08	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.
Process A	7101	0.260	lb CO/MMBTU	General CO emission factor developed from emission measurements of similar bar burners completed at the BAF Blackfoot Plant.
Process A	7102	0.260	lb CO/MMBTU	General CO emission factor developed from emission measurements of similar bar burners completed at the BAF Blackfoot Plant.
Process A	7019	0.260	lb CO/MMBTU	General CO emission factor developed from emission measurements of similar bar burners completed at the BAF Blackfoot Plant.
Process B	228	0.130	lb CO/MMBTU	General CO emission factor developed from emission measurements of similar bar burners completed at the BAF Blackfoot Plant.
Process B	234	0.130	lb CO/MMBTU	General CO emission factor developed from emission measurements of similar bar burners completed at the BAF Blackfoot Plant.
Plant	Heaters	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. On an annual basis, firing assumed to occur at a maximum of 50% of burner capacity.

Table C-3. Estimated Carbon Monoxide Emissions

Production Process	Stack Identification Code	Emission Factor	Units	Hourly Operating Factor	Hourly Operating Units	Hourly Emission Rate, lb/hr	Annual Operating Factor	Annual Operating Units	Annual Emissions, tpy
Boilers	Kipper Boiler	0.927	lb CO/000 lbs steam	60	000 lbs steam/hr	55.62	525600	lbs steam	243.6
Boilers	Boiler 1	0.082	lb CO/MMBTU	52	MMBTU/hr	4.28	455520	MMBtu	18.8
Boilers	Boiler 2	0.082	lb CO/MMBTU	35	MMBTU/hr	2.88	306600	MMBtu	12.6
Process A	7101	0.260	lb CO/MMBTU	6.50	MMBTU/hr	1.69	56940	MMBtu	7.4
Process A	7102	0.260	lb CO/MMBTU	6.50	MMBTU/hr	1.69	56940	MMBtu	7.4
Process A	7019	0.260	lb CO/MMBTU	6.60	MMBTU/hr	1.72	57816	MMBtu	7.5
Process B	228	0.130	lb CO/MMBTU	9.66	MMBTU/hr	1.26	84621.6	MMBtu	5.5
Process B	234	0.130	lb CO/MMBTU	6.44	MMBTU/hr	0.84	56414.4	MMBtu	3.7
Plant	Heaters	0.082	lb CO/MMBTU	30.80	MMBTU/hr	2.54	134904	MMBtu	5.6

Table C-4. Nitrogen Oxides Emission Factors

Production Process	Stack Identification Code	Emission Factor	Emission Factor Units	Basis for Factor
Boilers	Kipper Boiler	0.456	lb NOx/000 lbs steam	Based on 50% firing of boiler with coal. Emission factor is a combination of AP-42 estimate for subbituminous coal and 0.332 lb NOx/000 lbs steam reported in 1994 Source Emission Evaluation Report.
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.
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.
Process A	7101	0.051	lb NOx/MMBTU	General NOx emission factor developed from emission measurements of similar bar burners completed at the BAF Blackfoot Plant.
Process A	7102	0.051	lb NOx/MMBTU	General NOx emission factor developed from emission measurements of similar bar burners completed at the BAF Blackfoot Plant.
Process A	7019	0.051	lb NOx/MMBTU	General NOx emission factor developed from emission measurements of similar bar burners completed at the BAF Blackfoot Plant.
Process B	228	0.026	lb NOx/MMBTU	General NOx emission factor developed from emission measurements of similar bar burners completed at the BAF Blackfoot Plant.
Process B	234	0.026	lb NOx/MMBTU	General NOx emission factor developed from emission measurements of similar bar burners completed at the BAF Blackfoot Plant.
Plant	Heaters	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. On an annual basis, firing assumed to occur at a maximum of 50% of burner capacity.

Table C-5. Nitrogen Oxides Emissions

Production Process	Stack Identification Code	Emission Factor	Emission Factor Units	Operating Rate	Operating Rate Units	Emission Rate, lb/hr	Annual Operating Factor	Annual Operating Units	Annual Emissions, tpy
Boilers	Kipper Boiler	0.456	lb NOx/000 lbs steam	60	000 lbs steam/hr	27.38	525600	lbs steam	119.9
Boilers	Boiler 1	0.098	lb NOx/MMBTU	52	MMBTU/hr	5.10	455520	MMBtu	22.3
Boilers	Boiler 2	0.098	lb NOx/MMBTU	35	MMBTU/hr	3.43	306600	MMBtu	15.0
Process A	7101	0.051	lb NOx/MMBTU	6.50	MMBTU/hr	0.33	56940	MMBtu	1.5
Process A	7102	0.051	lb NOx/MMBTU	6.50	MMBTU/hr	0.33	56940	MMBtu	1.5
Process A	7019	0.051	lb NOx/MMBTU	6.60	MMBTU/hr	0.34	57816	MMBtu	1.5
Process B	228	0.026	lb NOx/MMBTU	9.66	MMBTU/hr	0.25	84621.6	MMBtu	1.1
Process B	234	0.026	lb NOx/MMBTU	6.44	MMBTU/hr	0.16	56414.4	MMBtu	0.7
Plant	Heaters	0.098	lb NOx/MMBTU	30.80	MMBTU/hr	3.02	134904	MMBtu	6.6

Table C-6. Sulfuar Dioxide Emission Factors

	Stack	Process Related SO2 Emissions			Combustion Related SO2 Emissions		
Boilers	Kipper Boiler	0.00	NA	NA	0.8149	lb SO2/000 lbs steam	Based on 50% firing of boiler with 0.7 wt% S coal. Emission factor is a combination of AP-42 estimates for subbituminous coal and for wood waste combustion
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 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 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 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 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 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 completed at each stage.	0.0000	NA	NA
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 completed at each stage.	0.0024	lb SO2/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion 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 completed at each stage	0.0024	lb SO2/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion and assuming 1020 BTU/scf and 0.8 gr/Ccf sulfur content of natural gas.

Table C-6. Sulfuar Dioxide Emission Factors

	Stack	Process Related SO2 Emissions			Combustion Related SO2 Emissions		
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 312.	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
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 0.8 gr/Ccf sulfur content of natural gas. On an annual basis, firing assumed to occur at a maximum of 50% of burner capacity.

Table C-7. Sulfur Dioxide Emissions

Production Process	Stack Identification Code	Process Related SO2 Emissions					Combustion Related SO2 Emissions					Total SO2 Emissions	
		Process Emission Factor	Process Emission Factor Units	Hourly Operating Rate	Annual Operating Rate	Process Operating Units	Combustion Emission Factor	Combustion Emission Units	Hourly Combustion Rate	Annual Combustion Rate	Combustion Units	Combined Hourly Emission Rate, lb/hr	Combined Annual Emissions, tpy
Boilers	Kipper Boiler	0	NA	0	0	NA	0.8149	lb SO2/000 lbs steam	60	525,600	000 lbs steam	48.89	214.2
Boilers	Boiler 1	0	NA	0	0	NA	0.0024	lb SO2/MMBTU	52	455,520	MMBTU	0.12	0.5
Boilers	Boiler 2	0	NA	0	0	NA	0.0024	lb SO2/MMBTU	35	306,600	MMBTU	0.08	0.4
Process A	7101	0.005	lb SO2/000 lb unit process throughput	20.4	178704	000 lb unit process throughput	0.0024	lb SO2/MMBTU	6.5	56,940	MMBTU	0.12	0.5
Process A	7102	0.005	lb SO2/000 lb unit process throughput	20.4	178704	000 lb unit process throughput	0.0024	lb SO2/MMBTU	6.5	56,940	MMBTU	0.12	0.5
Process A	7019	0.005	lb SO2/000 lb unit process throughput	40.8	357408	000 lb unit process throughput	0.0024	lb SO2/MMBTU	6.6	57,816	MMBTU	0.22	1.0
Process A	7001	0.005	lb SO2/000 lb unit process throughput	5.1	44676	000 lb unit process throughput	0.0000	NA	0.0	0	NA	0.03	0.1
Process B	5037	0.110	lbs SO2/000 lbs product	17.0	148920	000 lbs product	0.0000	NA	0.0	0	NA	1.87	8.2
Process B	4000	0.065	lbs SO2/000 lbs product	4.0	35040	000 lbs product	0.0000	NA	0.0	0	NA	0.26	1.1
Process B	228	0.042	lbs SO2/000 lbs product	4.0	35040	000 lbs product	0.0024	lb SO2/MMBTU	9.7	84,622	MMBTU	0.19	0.8
Process B	234	0.012	lbs SO2/000 lbs product	4.0	35040	000 lbs product	0.0024	lb SO2/MMBTU	6.4	56,414	MMBTU	0.06	0.3
Process B	311	0.030	lbs SO2/000 lbs product	1.5	13140	000 lbs product	0.0000	NA	0.0	0	NA	0.05	0.2

Table C-7. Sulfur Dioxide Emissions

Production Process	Stack Identification Code	Process Related SO2 Emissions					Combustion Related SO2 Emissions					Total SO2 Emissions	
		Process Emission Factor	Process Emission Factor Units	Hourly Operating Rate	Annual Operating Rate	Process Operating Units	Combustion Emission Factor	Combustion Emission Units	Hourly Combustion Rate	Annual Combustion Rate	Combustion Units	Combined Hourly Emission Rate, lb/hr	Combined Annual Emissions, tpy
Process B	312	0.030	lbs SO2/000 lbs product	1.5	13140	000 lbs product	0.0000	NA	0.0	0	NA	0.05	0.2
Process B	410/411	0.059	lbs SO2/000 lbs product	1.5	13140	000 lbs product	0.0000	NA	0.0	0	NA	0.09	0.4
Process B	613/614	0.060	lbs SO2/000 lbs product	2.8	24528	000 lbs product	0.0000	NA	0.0	0	NA	0.17	0.7
Process B	615/616	0.046	lbs SO2/000 lbs product	2.8	24528	000 lbs product	0.0000	NA	0.0	0	NA	0.13	0.6
Process B	638	0.013	lbs SO2/000 lbs product	2.8	24528	000 lbs product	0.0000	NA	0.0	0	NA	0.04	0.2
Plant	Heaters	0	NA	0	0	NA	0.0024	lb SO2/MMBTU	30.8	134,904	MMBTU	0.07	0.2

Table C-8. Particulate Matter Emission Factors

Production Process	Stack Identification Code	Emission Factor	Units	Basis for Factor
Boilers	Kipper Boiler	0.276	lb PM/000 lbs steam	Based on 50% firing of boiler with coal. Emission factor is a combination of AP-42 estimate for uncontrolled combustion of subbituminous coal and 0.213 lb PM/000 lbs steam reported in 1994 Source Emission Evaluation Report. 74% scrubber efficiency applied to coal emission factor.
Plant	Woodpile	9.100	lb PM/hr	From AP-42, Section 10.3 (2/80) for sawdust handling at plywood veneer plant. Also assuming 5000 Btu/lb of wood, 1000 Btu/lb of steam, 60,000 lb steam/hr, and 65.9% boiler efficiency.
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	0.116	lb PM/000 lbs unit process throughput	Process and stack similarity to Stack DHZ at Blackfoot Plant
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 the sum of stacks HEB and HNL at Blackfoot Plant; 50% of process PM emission factor allocated to predryer.
Process B	228	0.320	lb PM/000 lbs production process output	Total process emission assumed to be the same as the sum of stacks HEB and HNL at Blackfoot Plant; 25% of process PM emission factor assigned to this stack.
Process B	234	0.092	lb PM/000 lbs production process output	Total process emission assumed to be the same as the sum of stacks HEB and HNL at Blackfoot Plant; 25% of process PM emission factor assigned to this stack.
Process B	311	0.228	lb PM/000 lbs production process output	Total process emission assumed to be the same as the sum of stacks HEB and HNL at Blackfoot Plant; 25% of emission assigned to stack 311.
Process B	312	0.228	lb PM/000 lbs production process output	Total process emission assumed to be the same as the sum of stacks HEB and HNL at Blackfoot Plant; 25% of emission assigned to stack 312.
Process B	410/411	0.458	lb PM/000 lbs production process output	Total process emission assumed to be the same as the sum of stacks HEB and HNL at Blackfoot Plant; 50% of emission assigned to stack 410/411.

Table C-8. Particulate Matter Emission Factors

Production Process	Stack Identification Code	Emission Factor	Units	Basis for Factor
Process B	613/614	0.457	lb PM/000 lbs production process output	Total process emission assumed to be the same as the sum of stacks HEB and HNL 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 the sum of stacks HEB and HNL at Blackfoot Plant; total process PM emission factor allocated in proportion to stack discharge air flows.
Process B	638	0.101	lb PM/000 lbs production process output	Total process emission assumed to be the same as the sum of stacks HEB and HNL at Blackfoot Plant; total process PM emission factor allocated in proportion to stack discharge air flows.
Process B	707	0.000	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	0.016	lb PM/000 lb of product transported	Process and stack similarity to Blackfoot 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	0.016	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	0.007	lb PM/MMBTU	Based on AP-42, Table 1.4-2 (7/98), for uncontrolled combustion and assuming 1020 BTU/scf. On an annual basis, firing assumed to occur at a maximum of 50% of burner capacity.
Plant	Plant Roads	17	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 C-9. Particulate Matter Emissions

Production Process	Stack Identification Code	Emission Factor	Units	Hourly Operating Factor	Hourly Operating Units	Emission Rate, lb/hr	Annual Operating Factor	Annual Operating Units	Annual Emissions, tpy
Boilers	Kipper Boiler	0.276	lb PM/000 lbs steam	60	000 lbs steam/hr	16.59	525600	000 lbs steam/yr	72.6
Plant	Woodpile	9.100	lb PM/hr	NA	-	9.100	8760	hrs/yr	39.9
Boilers	Boiler 1	0.007	lb PM/MMBTU	52	MMBtu/hr	0.387	455520	MMBtu	1.7
Boilers	Boiler 2	0.007	lb PM/MMBTU	35.0	MMBtu/hr	0.261	306600	MMBtu	1.1
Process A	7020	0.018	lb PM/000 lbs unit process throughput	40.8	000 lbs throughput/hr	0.714	357408	000 lbs throughput/yr	3.1
Process A	7101	0.140	lb PM/000 lbs unit process throughput	20.4	000 lbs throughput/hr	2.856	178704	000 lbs throughput/yr	12.5
Process A	7102	0.140	lb PM/000 lbs unit process throughput	20.4	000 lbs throughput/hr	2.856	178704	000 lbs throughput/yr	12.5
Process A	7019	0.116	lb PM/000 lbs unit process throughput	40.8	000 lbs throughput/hr	4.733	357408	000 lbs throughput/yr	20.7
Process A	7001	0.053	lb PM/000 lbs unit process throughput	5.1	000 lbs throughput/hr	0.270	44676	000 lbs throughput/yr	1.2
Process A	7027	0.015	lb PM/000 lbs unit process throughput	5.1	000 lbs throughput/hr	0.077	44676	000 lbs throughput/yr	0.3
Process A	7006	0.005	lb PM/000 lbs production process output	40.8	000 lbs production process output	0.204	357408	000 lbs throughput/yr	0.9
Process B	5034	0.003	lb PM/000 lbs production process output	17.0	000 lbs production process output	0.051	148920	000 lbs throughput/yr	0.2
Process B	5037	0.101	lb PM/000 lbs production process output	17.0	000 lbs production process output	1.717	148920	000 lbs throughput/yr	7.5
Process B	4000	0.503	lb PM/000 lbs production process output	4.0	000 lbs production process output	2.012	35040	000 lbs throughput/yr	8.8
Process B	228	0.320	lb PM/000 lbs production process output	4.0	000 lbs production process output	1.280	35040	000 lbs throughput/yr	5.6
Process B	234	0.092	lb PM/000 lbs production process output	4.0	000 lbs production process output	0.368	35040	000 lbs throughput/yr	1.6
Process B	311	0.228	lb PM/000 lbs production process output	1.5	000 lbs production process output	0.342	13140	000 lbs throughput/yr	1.5
Process B	312	0.228	lb PM/000 lbs production process output	1.5	000 lbs production process output	0.342	13140	000 lbs throughput/yr	1.5
Process B	410/411	0.458	lb PM/000 lbs production process output	1.5	000 lbs production process output	0.686	13140	000 lbs throughput/yr	3.0
Process B	613/614	0.457	lb PM/000 lbs production process output	2.8	000 lbs production process output	1.280	24528	000 lbs throughput/yr	5.6
Process B	615/616	0.357	lb PM/000 lbs production process output	2.8	000 lbs production process output	1.000	24528	000 lbs throughput/yr	4.4
Process B	638	0.101	lb PM/000 lbs production process output	2.8	000 lbs production process output	0.283	24528	000 lbs throughput/yr	1.2
Process B	707	0.000	lb PM/000 lb of unit process throughput	30.4	000 lbs production process output	0.003	266304	000 lbs throughput/yr	0.0
Process B	725	0.002	lb PM/000 lb of unit process throughput	30.4	000 lbs production process output	0.049	266304	000 lbs throughput/yr	0.2

Table C-9. Particulate Matter Emissions

Production Process	Stack Identification Code	Emission Factor	Units	Hourly Operating Factor	Hourly Operating Units	Emission Rate, lb/hr	Annual Operating Factor	Annual Operating Units	Annual Emissions, tpy
Process B	8	0.002	lb PM/000 lb of product transported	30.4	000 lb of product transported	0.049	266304	000 lbs throughput/yr	0.2
Process B	5001	0.016	lb PM/000 lb of product transported	30.4	000 lb of product transported	0.486	266304	000 lbs throughput/yr	2.1
Process B	5000	0.002	lb PM/000 lb of product transported	30.4	000 lb of product transported	0.049	266304	000 lbs throughput/yr	0.2
Process B	432	0.002	lb PM/000 lb of product transported	30.4	000 lb of product transported	0.049	266304	000 lbs throughput/yr	0.2
Process B	322	0.016	lb PM/000 lb of product transported	30.4	000 lb of product transported	0.486	266304	000 lbs throughput/yr	2.1
Process B	572	0.150	lb PM/000 lb of product transported	5.0	000 lb of product transported	0.750	43680	000 lbs throughput/yr	3.3
Plant	Heaters	0.007	lb PM/MMBTU	30.8	MMBtu/hr	0.229	134904	MMBtu	0.5
Plant	Plant Roads	17	lb PM/hr	NA	lb/hr	17	8760	hrs/yr	74.5

Table C-10. PM10 Emission Factors

Production Process	Stack Identification Code	Emission Factor	Units	Basis for Factor
Boilers	Kipper Boiler	0.271	lb PM10/000 lbs steam	Based on 50% firing of boiler with coal. From AP-42, Sec. 1.6 (7/01), 98 percent of total TSP emitted from wood waste boiler using multiclones and wet scrubber is PM10. This percentage applied to both coal and wood related emissions.
Plant	Woodpile	2.275	lb PM10/hr	Assumed to be 25% of PM factor
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	0.083	lb PM10/000 lbs unit process throughput	Process and stack similarity to Stack DHZ at Blackfoot Plant
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 the sum of stacks HEB and HNL at Blackfoot Plant. 50 % of process emissions allocated to this stack.
Process B	228	0.274	lb PM10/000 lbs production process output	Total process emission assumed to be the same as the sum of stacks HEB and HNL at Blackfoot Plant. 25 % of process emissions allocated to this stack.
Process B	234	0.078	lb PM10/000 lbs production process output	Total process emission assumed to be the same as the sum of stacks HEB and HNL at Blackfoot Plant. 25 % of process emissions allocated to this stack.
Process B	311	0.195	lb PM10/000 lbs production process output	Total process emission assumed to be the same as the sum of stacks HEB and HNL at Blackfoot Plant; 25% of emission assigned to stack 311.
Process B	312	0.195	lb PM10/000 lbs production process output	Total process emission assumed to be the same as the sum of stacks HEB and HNL at Blackfoot Plant; 25% of emission assigned to stack 312.
Process B	410/411	0.391	lb PM10/000 lbs production process output	Total process emission assumed to be the same as the sum of stacks HEB and HNL at Blackfoot Plant; 50% of emission assigned to stack 410/411.
Process B	613/614	0.391	lb PM10/000 lbs production process output	Total process emission assumed to be the same as the sum of stacks HEB and HNL at Blackfoot Plant; total process PM emission factor allocated in proportion to stack discharge air flows.

Table C-10. PM10 Emission Factors

Production Process	Stack Identification Code	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 the sum of stacks HEB and HNL at Blackfoot Plant; total process PM emission factor allocated in proportion to stack discharge air flows.
Process B	638	0.086	lb PM10/000 lbs production process output	Total process emission assumed to be the same as the sum of stacks HEB and HNL at Blackfoot Plant; total process PM emission factor allocated in proportion to stack discharge air flows.
Process B	707	0.000	lb PM10/000 lb of unit process throughput	Process and stack similarity to Stack EUW at Blackfoot Plant. 90% PM10 removal assumed to occur in fabric filter.
Process B	725	0.0016	lb PM10/000 lb of unit process throughput	Due to presence of fabric filter, 100 % of TSP emissions assumed to be PM10.
Process B	8	0.0016	lb PM10/000 lb of product transported	Due to presence of fabric filter, 100 % of TSP emissions assumed to be PM10.
Process B	5001	0.0080	lb PM10/000 lb of product transported	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	Due to presence of fabric filter, 100 % of TSP emissions assumed to be PM10.
Process B	432	0.0016	lb PM10/000 lb of product transported	Due to presence of fabric filter, 100 % of TSP emissions assumed to be PM10.
Process B	322	0.0080	lb PM10/000 lb of product transported	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	0.007	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.
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 C-11. PM10 Emissions

Production Process	Stack Identification Code	Emission Factor	Units	Hourly Operating Factor	Hourly Operating Units	Emission Rate, lb/hr	Annual Operating Factor	Annual Operating Units	Annual Emissions, tpy
Boilers	Kipper Boiler	0.271	lb PM10/000 lbs steam	60	000 lbs steam/hr	16.25	525600	000 lbs steam/yr	71.2
Plant	Woodpile	2.275	lb PM10/hr	NA	-	2.275	8760	hrs/yr	10.0
Boilers	Boiler 1	0.007	lb PM10/MMBTU	52	MMBtu/hr	0.387	455520	MMBtu	1.7
Boilers	Boiler 2	0.007	lb PM10/MMBTU	35.0	MMBtu/hr	0.261	306600	MMBtu	1.1
Process A	7020	0.010	lb PM10/000 lbs unit process throughput	40.8	000 lbs throughput/hr	0.415	357408	000 lbs throughput/yr	1.8
Process A	7101	0.106	lb PM10/000 lbs unit process throughput	20.4	000 lbs throughput/hr	2.162	178704	000 lbs throughput/yr	9.5
Process A	7102	0.106	lb PM10/000 lbs unit process throughput	20.4	000 lbs throughput/hr	2.162	178704	000 lbs throughput/yr	9.5
Process A	7019	0.083	lb PM10/000 lbs unit process throughput	40.8	000 lbs throughput/hr	3.386	357408	000 lbs throughput/yr	14.8
Process A	7001	0.046	lb PM10/000 lbs unit process throughput	5.1	000 lbs throughput/hr	0.235	44676	000 lbs throughput/yr	1.0
Process A	7027	0.008	lb PM10/000 lbs unit process throughput	5.1	000 lbs throughput/hr	0.041	44676	000 lbs throughput/yr	0.2
Process A	7006	0.003	lb PM10/000 lbs production process output	40.8	000 lbs production process output	0.122	357408	000 lbs throughput/yr	0.5
Process B	5034	0.001	lb PM10/000 lbs production process output	17.0	000 lbs production process output	0.017	148920	000 lbs throughput/yr	0.1
Process B	5037	0.076	lb PM10/000 lbs production process output	17.0	000 lbs production process output	1.292	148920	000 lbs throughput/yr	5.7
Process B	4000	0.430	lb PM10/000 lbs production process output	4.0	000 lbs production process output	1.720	35040	000 lbs throughput/yr	7.5
Process B	228	0.274	lb PM10/000 lbs production process output	4.0	000 lbs production process output	1.096	35040	000 lbs throughput/yr	4.8
Process B	234	0.078	lb PM10/000 lbs production process output	4.0	000 lbs production process output	0.312	35040	000 lbs throughput/yr	1.4
Process B	311	0.195	lb PM10/000 lbs production process output	1.5	000 lbs production process output	0.293	13140	000 lbs throughput/yr	1.3
Process B	312	0.195	lb PM10/000 lbs production process output	1.5	000 lbs production process output	0.293	13140	000 lbs throughput/yr	1.3
Process B	410/411	0.391	lb PM10/000 lbs production process output	1.5	000 lbs production process output	0.587	13140	000 lbs throughput/yr	2.6
Process B	613/614	0.391	lb PM10/000 lbs production process output	2.8	000 lbs production process output	1.095	24528	000 lbs throughput/yr	4.8
Process B	615/616	0.305	lb PM10/000 lbs production process output	2.8	000 lbs production process output	0.854	24528	000 lbs throughput/yr	3.7
Process B	638	0.086	lb PM10/000 lbs production process output	2.8	000 lbs production process output	0.241	24528	000 lbs throughput/yr	1.1
Process B	707	0.000	lb PM10/000 lb of unit process throughput	30.4	000 lbs production process output	0.000	266304	000 lbs throughput/yr	0.0
Process B	725	0.002	lb PM10/000 lb of unit process throughput	30.4	000 lbs production process output	0.049	266304	000 lbs throughput/yr	0.2

Table C-11. PM10 Emissions

Production Process	Stack Identification Code	Emission Factor	Units	Hourly Operating Factor	Hourly Operating Units	Emission Rate, lb/hr	Annual Operating Factor	Annual Operating Units	Annual Emissions, tpy
Process B	8	0.002	lb PM10/000 lb of product transported	30.4	000 lb of product transported	0.049	266304	000 lbs throughput/yr	0.2
Process B	5001	0.008	lb PM10/000 lb of product transported	30.4	000 lb of product transported	0.243	266304	000 lbs throughput/yr	1.1
Process B	5000	0.002	lb PM10/000 lb of product transported	30.4	000 lb of product transported	0.049	266304	000 lbs throughput/yr	0.2
Process B	432	0.002	lb PM10/000 lb of product transported	30.4	000 lb of product transported	0.049	266304	000 lbs throughput/yr	0.2
Process B	322	0.008	lb PM10/000 lb of product transported	30.4	000 lb of product transported	0.243	266304	000 lbs throughput/yr	1.1
Process B	572	0.038	lb PM10/000 lb of product transported	5.0	000 lb of product transported	0.188	43680	000 lbs throughput/yr	0.8
Plant	Heaters	0.007	lb PM10/MMBTU	30.8	MMBtu/hr	0.229	134904	MMBtu	0.5
Plant	Plant Roads	3	lb PM10/hr	NA	lb/hr	3	8760	hrs/yr	15.0

Table C-12. VOC Emission Factors

Production Process	Stack Identification Code	Emission Factor	Emission Factor Units	Basis for Factor
Boilers	Kipper Boiler	0.049	lb VOC/000 lbs steam	From 1994 Source Emission Evaluation Report. Emission factor is for 100% firing with wood waste.
Plant	Woodpile	3.410	lb VOC/hr	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 used is equal to 0.0095 lb/m2-day.
Boilers	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.
Boilers	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.
Process A	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.
Process A	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.
Process A	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.
Process B	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.
Process B	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.
Plant	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 C-13. VOC Emissions

Production Process	Stack Identification Code	Emission Factor	Units	Hourly Operating Factor	Hourly Operating Units	Hourly Emission Rate, lb/hr	Annual Operating Factor	Annual Operating Units	Annual Emissions, tpy
Boilers	Kipper Boiler	0.0490	lb VOC/000 lbs steam	60	000 lbs steam/hr	2.939	525600	lbs steam	12.9
Plant	Woodpile	3.41	lb VOC/hr	-	-	3.410	8760	hrs/yr	14.9
Boilers	Boiler 1	0.0054	lb VOC/MMBTU	52	MMBTU/hr	0.280	455520	MMBtu	1.2
Boilers	Boiler 2	0.0054	lb VOC/MMBTU	35.0	MMBTU/hr	0.189	306600	MMBtu	0.8
Process A	7101	0.0054	lb VOC/MMBTU	6.50	MMBTU/hr	0.04	56940	MMBtu	0.2
Process A	7102	0.0054	lb VOC/MMBTU	6.50	MMBTU/hr	0.035	56940	MMBtu	0.2
Process A	7019	0.0054	lb VOC/MMBTU	6.60	MMBTU/hr	0.04	57816	MMBtu	0.2
Process B	228	0.0054	lb VOC/MMBTU	9.66	MMBTU/hr	0.05	84621.6	MMBtu	0.2
Process B	234	0.0054	lb VOC/MMBTU	6.44	MMBTU/hr	0.03	56414.4	MMBtu	0.2
Plant	Heaters	0.0054	lb VOC/MMBTU	30.80	MMBTU/hr	0.17	134904	MMBtu	0.4

Table C-14. Lead Emission Factors

Production Process	Stack Identification Code	Emission Factor	Emission Factor Units	Basis for Factor
Boilers	Kipper Boiler	7.20E-05	lb Pb/000 lbs steam	Based on 100% firing with wood waste. From AP-42, Sec 1.6 (7/01) for wood waste combustion. Converted to steam rate assuming 7000 BTU/lb of fuel and 1500 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.
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 C-15. Lead Emissions

Production Process	Stack Identification Code	Emission Factor	Emission Factor Units	Operating Rate	Operating Rate Units	Emission Rate, lb/hr	Annual Operating Factor	Annual Operating Units	Annual Emissions, tpy
Boilers	Kipper Boiler	7.20E-05	lb Pb/000 lbs steam	60	000 lbs steam/hr	4.32E-03	525600	lbs steam	1.89E-02
Boilers	Boiler 1	4.90E-07	lbs Pb/ MM Btu	52	MM Btu/hr	2.55E-05	455520	MMBtu	1.12E-04
Boilers	Boiler 2	4.90E-07	lbs Pb/ MM Btu	35	MM Btu/hr	1.72E-05	306600	MMBtu	7.51E-05
Process A	7101	4.90E-07	lbs Pb/ MM Btu	6.50	MM Btu/hr	3.19E-06	56940	MMBtu	1.40E-05
Process A	7102	4.90E-07	lbs Pb/ MM Btu	6.50	MM Btu/hr	3.19E-06	56940	MMBtu	1.40E-05
Process A	7019	4.90E-07	lbs Pb/ MM Btu	6.60	MM Btu/hr	3.24E-06	57816	MMBtu	1.42E-05
Process B	228	4.90E-07	lbs Pb/ MM Btu	9.66	MM Btu/hr	4.74E-06	84621.6	MMBtu	2.07E-05
Process B	234	4.90E-07	lbs Pb/ MM Btu	6.44	MM Btu/hr	3.16E-06	56414.4	MMBtu	1.38E-05
Plant	Heaters	4.90E-07	lbs Pb/ MM Btu	30.80	MM Btu/hr	1.51E-05	134904	MMBtu	3.31E-05