Stantec Consulting Services Inc.
3133 West Frye Road Suite 300, Chandler AZ 85226-5155

October 18, 2023

Mr. Daniel Czecholinski
Director, Air Quality Division
Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, Arizona 85007

RE: Class II Permit Renewal Application
Forest Energy Corporation
Class II Air Quality Permit #73803

Dear Mr. Czecholinski:

Lignetics Group owns the Forest Energy Corporation wood fuel pellet and animal bedding manufacturing facility in Show Low, Arizona as authorized by Class II Air Quality Permit #73803, issued by the Arizona Department of Environmental Quality (ADEQ) on January 18, 2019. As per Title 18, Chapter 2, Section 304.D.2 (R18-2-304.D.2) of the Arizona Administrative Code (A.A.C.), and on behalf of Forest Energy Corporation, Stantec Consulting Services Inc. is submitting the enclosed application for renewal of the Class II Air Quality Permit.

If you have any questions concerning this application or need additional details, please feel free to contact me using the phone number or email address noted below.

Sincerely,

Kathy Houed
Engineering Consultant
Phone: (480) 687-6123
khoued@stantec.com

Forest Energy Corporation

Class II Permit Renewal Application
Class II Air Quality Permit #73803
Show Low, Arizona

Prepared for:

Forest Energy Corporation
1001 North 40th Street
Show Low, Arizona 85901
Contact: 928.587.1836

Prepared by:

Stantec Consulting Services Inc.
3133 West Frye Road, Suite 300
Chandler, Arizona 85226
Contact: 480.687.6123

Submitted to:

Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, Arizona 85007

October 18, 2023

SIGN-OFF SHEET

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Prepared by: Kathy Houed
(signature)

Kathy Houed

Reviewed by: Amber S
(signature)

Amber Summers

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EXECUTIVE SUMMARY

Forest Energy Corporation operates a wood fuel pellet and animal bedding manufacturing facility in Show Low, Arizona as authorized by Class II Air Quality Permit #73803, issued by the Arizona Department of Environmental Quality (ADEQ) on January 18, 2019. As per Title 18, Chapter 2, Section 304.D.2 (R18-2-304.D.2) of the Arizona Administrative Code (A.A.C.), Forest Energy Corporation is submitting this application for renewal of its Class II Air Quality Permit. Additionally, as part of the application, Forest Energy Corporation requests to make various updates to permit conditions, equipment, and emission calculations (see Section 2).

Key elements of the application are presented below along with a table identifying all components of the application. ADEQ's application administrative completeness checklist is presented in Appendix G.

Overview of Operations

The Forest Energy Corporation facility is an industrial complex located in Navajo County in northeastern Arizona and is comprised of wood grinding, sawdust drying, pellet and animal bedding production, and pellet screening and packaging operations. The standard industrial classification (SIC) for Forest Energy Corporation's primary activity is reconstituted wood products, SIC Code 2493. Products of the Forest Energy Corporation facility include wood fuel pellets and animal bedding. The facility is capable of operating continuously for 24 hours per day (hrs/day) and 365 days per year (days/yr).

Potential to Emit Summary

The operations at the Forest Energy Corporation facility have the potential to emit (PTE) the following regulated air pollutant emissions: particulate matter (PM); particulate matter less than or equal to 10 microns in aerodynamic diameter (PM_{10}); particulate matter less than or equal to 2.5 microns in aerodynamic diameter ($PM_{2.5}$); condensable particulate matter (CPM), which is always included in the PTE of PM_{10} and $PM_{2.5}$; carbon monoxide (CO); nitrogen oxides (NO_X); sulfur dioxide (SO_2); volatile organic compounds (VOCs); hazardous air pollutants (HAPs); and greenhouse gases (GHGs or CO_2e)[1], including carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). CO_2e emissions are calculated by summing the individual greenhouse gas emissions multiplied by their global warming potential (GWP). The GWP of CO_2 is 1, the GWP of CH_4 is 25, and the GWP of N_2O is 298.

The PTE of the entire Forest Energy Corporation facility is presented in Table ES.1. The primary activity of the Forest Energy Corporation facility is reconstituted wood products, which is not a "categorical source", or a "Section 302(j) category" source as defined in A.A.C. R18-2-101.23 and R18-2-101.129, respectively. Therefore, only non-fugitive emissions are included in the determination of the facility-wide PTE of regulated air pollutants (except HAP emissions). All HAP emissions are included in the determination of the facility-wide PTE regardless of their fugitive or non-fugitive classification.

[1] While GHGs are not included under the definition of "regulated air pollutant" at A.A.C. R18-2-101.122, they are considered a "regulated NSR pollutant" under the PSD program at 40 CFR 52.21(b)(50) and therefore included here for informational purposes.

As shown in Table ES.1, the PTE of facility-wide operations is greater than the Class II permitting thresholds, but less than the Class I (Title V) major source permitting thresholds, the Prevention of Significant Deterioration (PSD) major source thresholds (for a non-categorical source in an attainment/ unclassifiable area), and the HAP major source thresholds. Consequently, the Forest Energy Corporation facility is a non-Title V, minor PSD, and minor HAP source requiring a Class II permit.

Information Required to be Included in the Application

According to A.A.C. R18-2-304.B, applicants applying for a Class II permit renewal must "complete the applicable standard application form provided by the Director and supply all information required by the form's filing instructions." It is assumed that "all information required by the form's filing instructions" refers to Section 3.2 (Standard Class II Permit Application Components) of ADEQ's Application Packet for a Class II Permit. An application for a Class II permit renewal must also include the information required by A.A.C. R18-2-304.F. Identification of the information presented in this application, including the Standard Permit Application Form and the application components from ADEQ's Application Packet for a Class II Permit are listed in Table ES.2. The section or appendix where the information can be located in this document is also presented in Table ES.2.

Table ES.1 Potential to Emit and Threshold Comparison

REGULATED AIR POLLUTANT EMITTED	FACILITY-WIDE PTE (TPY) [a]	THRESHOLDS (TPY)			
		CLASS II PERMITTING	TITLE V MAJOR SOURCE PERMITTING	HAP MAJOR SOURCE	PSD MAJOR SOURCE
PM	66.08	25		--	250
PM_{10}	58.37	15	100	--	250
$PM_{2.5}$	58.22	10	100	--	250
CO	23.83	100	100	--	250
NO_X	20.32	40	100	--	250
SO_2	0	40	100	--	250
VOC	31.54	40	100	--	250
CO_2e [b]	27,540	--	--	--	--
Lead	0	0.6	--	10	250
Greatest Single HAP [c]	0.58	--	--	10	--
Total HAPs	2.45	--	--	25	--

[a] Except for HAPs, the PTE includes all non-fugitive emission units. For HAPs, the PTE includes all non-fugitive and fugitive emission units.

[b] CO_2e emissions are calculated by summing the individual greenhouse gas emissions multiplied by their global warming potential (GWP). GWP of CO_2 = 1, GWP of CH_4 = 25, GWP of N_2O = 298.

[c] The greatest single HAP for the Forest Energy Corporation facility is methanol.

Table ES.2 Identification of Application Components

Application Component	Included in Application?			Comment
	Yes	No	Not Applicable	
Standard Class II Permit Application Form Including a Certification from the Responsible Official	X			See Appendix A.
Description of Each Process at the Facility	X			See Section 2.
Process Flow Diagrams	X			See Appendix D.
Description of Alternate Operating Scenarios			X	See Section 3.
Identification and Description of Pollution Controls [a]	X			See Section 4.
Emissions Calculations Including the Calculation Methodology and an Electronic Copy	X			See Section 5 and Appendices C, E, and F.
Minor NSR Applicability Determination			X	See Section 10.
Applicable Requirements [b] and Explanation of Any Proposed Exemptions from Otherwise Applicable Requirements	X			See Section 7.
Proposed Voluntary Limitations	X			See Section 6.

Table ES.2 Identification of Application Components

Application Component	Included in Application?			Comment
	Yes	No	Not Applicable	
Equipment List	X			See Appendix B.
Emission Source Form	X			See Appendix C.
Listing of Insignificant and Trivial Activities	X			See Section 8.
Identification of Confidential Information			X	See Section 11.
Compliance Schedule (only if not currently in compliance)			X	See Section 9.
Description of Proposed Updates and Corrections			X	No updates or corrections are being requested.
Suggested Draft Permit Language [c]			X	The application is not an MPR application.

[a] While this is not included in Section 3.2, Standard Class II Permit Application Components of ADEQ's Application Packet for Class II Permit, it is identified in Item 8 of the Section 5.0 – Application Administrative Completeness Checklist and therefore included as part of the application.

[b] While this is not included in Section 3.2, Standard Class II Permit Application Components of ADEQ's Application Packet for Class II Permit, it is included as part of the application for purposes of clarification and completeness.

[c] While this is not required for applications that do not involve a minor permit revision by Section 3.2, Standard Class II Permit Application Components of ADEQ's Application Packet for Class II Permit, it will be submitted as a courtesy to assist in the review and preparation of the renewal permit.

ABBREVIATIONS

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
AOS	Alternate Operating Scenario
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources, Fifth Edition
A.R.S.	Arizona Revised Statutes
CFR	Code of Federal Regulations
cfm	Cubic Feet per Minute
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Greenhouse Gases Expressed as Carbon Dioxide Equivalent Calculated by Summing the Individual Greenhouse Gas Emissions Multiplied by Their Global Warming Potential
days/yr	Days per Year
dscfm	Dry Standard Cubic Feet per Minute
EPA	U.S. Environmental Protection Agency
GHG	Greenhouse Gas
GWP	Global Warming Potential
HAP	Hazardous Air Pollutant
hrs/day	Hours per Day
kg/MMBtu	Kilograms per Million British Thermal Units
lbs/hr	Pounds per Hour
lbs/MMBtu	Pounds per Million Cubic Feet per Year
lbs/ODT	Pounds per Oven Dried Ton
lbs/1000 gal	Pounds per 1000 Gallons
MMBtu/hr	Million British Thermal Units per Hour
N_2O	Nitrous Oxide
NESHAP	National Emission Standards for Hazardous Air Pollutants
NMTOC	Non Methane Total Organic Compound

ABBREVIATIONS (cont'd)

NO_X	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
ODT/hr	Oven Dried Tons per Hour
ODT/yr	Oven Dried Tons per Year
PM	Particulate Matter
PM_{10}	Particulate Matter Less Than or Equal to 10 Microns in Aerodynamic Diameter
$PM_{2.5}$	Particulate Matter Less Than or Equal to 2.5 Microns in Aerodynamic Diameter
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
SCC	Source Classification Code
SIC	Standard Industrial Classification
SO_2	Sulfur Dioxide
tpy	Tons per Year
VOC	Volatile Organic Compounds

1 INTRODUCTION

Forest Energy Corporation operates a wood fuel pellet and animal bedding manufacturing facility in Show Low, Arizona as authorized by Class II Air Quality Permit #73803, issued by the Arizona Department of Environmental Quality (ADEQ) on January 18, 2019. During the permit term, Forest Energy Corporation did not submit any applications for permit revisions. Class II Air Quality Permit #73803 expires on January 17, 2024.

As per Title 18, Chapter 2, Section 304.D.2 (R18-2-304.D.2) of the Arizona Administrative Code (A.A.C.), Forest Energy Corporation is submitting this application for renewal of its Class II Air Quality Permit.

The following sections of this document provide the information required by A.A.C. R18-2-304 for a permit renewal application for a Class II source as set forth in ADEQ's Application Packet for Class II Permit. ADEQ's Standard Class II Permit Application Form and the Emission Source Form are presented in Appendix A and Appendix C, respectively. ADEQ's Application Administrative Completeness Checklist is provided in Appendix G.

2 VARIOUS UPDATES TO PERMIT CONDITIONS, EQUIPMENT, AND EMISSION CALCULATIONS

As part of this renewal application, Forest Energy Corporation proposes to work with ADEQ to correct, clarify, and streamline several conditions and the equipment list in Class I Air Quality Permit #72683. In general, the requested changes are: (a) remove the log mill from the permit; (b) add missing material bins, belt conveyors, screw conveyors, and bucket elevators to the permit; and (c) update emission calculations based on best available information. The remainder of this application incorporates all requested changes.

2.1 REMOVE OBSOLETE EQUIPMENT

Forest Energy Corporation no longer manufactures densified wood fire logs. Consequently, log mill (501) can be removed from the permit and equipment list.

2.2 ADD MISSING EQUIPMENT

While preparing this application, it was noted that several pieces of equipment were missing from the equipment list. Forest Energy Corporation request that the equipment in Table 2.1 be added to the permit and equipment list.

2.3 UPDATE EMISSION CALCULATIONS

As part of this application, Forest Energy Corporation proposes to add emission calculations associated with the missing equipment identified above consisting of material transfers associated with the material bins and belt conveyors. Additionally, Forest Energy Corporation proposes to add emission calculations for the unloading of material to and wind erosion of the raw material storage piles and make a few updates to the calculation methodologies used to determine potential facility-wide emissions. The updates are to ensure Forest Energy Corporation is calculating emissions using the best information reasonably available. The full updated emission calculation methodology is presented in Appendix E.

Table 2.1 Equipment to be Added to Permit

EQUIPMENT DESCRIPTION	EQUIPMENT ID NUMBER
Wood Grinding Area 124	
Feed Bin	631
Screw Conveyor	640
Sawdust Drying Area 123	
Dryer Infeed Bin	310
Screw Conveyor	325
Belt Conveyor	320
Pellet Production Area 456	
KD Feed Bin	210
KD Collection Conveyor	220
KD Bucket Elevator	230
KD Collection Screw #1	240
KD Collection Screw #2	249
KD Collection Screw #3	250
Screw Conveyor	262
Screw Conveyor	263
Screw Conveyor	270
Bucket Elevator	264
Belt Conveyor	510
Belt Conveyor	520
Bucket Elevator	530
Pellet Weight Screw	542
Belt Conveyor	543
Bucket Elevator	544
Pellet Screening & Packaging Area 10	
Belt Conveyor	830

3 PROCESS DESCRIPTION AND IDENTIFICATION OF EQUIPMENT SUBJECT TO PERMITTING

3.1 DESCRIPTION OF EACH PROCESS AT THE FACILITY

The Forest Energy Corporation facility is an industrial complex located in Navajo County in northeastern Arizona and is comprised of wood grinding, sawdust drying, pellet and animal bedding production, and pellet screening and packaging operations. The standard industrial classification (SIC) for Forest Energy Corporation's primary activity is reconstituted wood products, SIC Code 2493. Products of the Forest Energy Corporation facility include wood fuel pellets and animal bedding. The facility is capable of operating continuously for 24 hours per day (hrs/day) and 365 days per year (days/yr), with a maximum sustainable material production rate of 8 oven dried tons per hour (ODT/hr) and 70,080 oven dried tons per year (ODT/yr).

The operations at the Forest Energy Corporation facility have the potential to emit (PTE) the following regulated air pollutant emissions: particulate matter (PM); particulate matter less than or equal to 10 microns in aerodynamic diameter (PM_{10}); particulate matter less than or equal to 2.5 microns in aerodynamic diameter ($PM_{2.5}$); carbon monoxide (CO); nitrogen oxides (NO_X); sulfur dioxide (SO_2); volatile organic compounds (VOCs); hazardous air pollutants (HAPs); and greenhouse gases (GHGs or CO_2e)[1], including carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). CO_2e emissions are calculated by summing the individual greenhouse gas emissions multiplied by their global warming potential (GWP). The GWP of CO_2 is 1, the GWP of CH_4 is 25, and the GWP of N_2O is 298.

Descriptions of all processes at the Forest Energy Corporation facility are presented in the following sections. The process flow diagram showing an overview of the Forest Energy Corporation facility-wide operations is presented in Figure D.1 of Appendix D.

3.1.1 Wood Grinding Area (124)

Raw material comprised of mostly pine, some fir, and some hard wood is received in the form of logs, bark, chips, sawdust, and shavings. Logs are reduced to chips on-site. Both wet and dry materials are currently stored outside. The wet material is transferred from the storage pile to a feed bin (631) using a front-end loader. The feed bin supplies material to the wet hammermill (651) for size reduction using a screw conveyor (640). The wet hammermill process has been enclosed for particulate emissions control. The material is then sent for processing in the Sawdust Drying Area (see Section 3.1.2).

3.1.2 Sawdust Drying Area (123)

Wet material from the Wood Grinding Area (see Section 3.1.1) is deposited in the dryer infeed bin (310) and fed by screw conveyor (325) and belt conveyor (320) to the sawdust dryer (340) to reduce the material's moisture content. Material exiting the sawdust dryer passes through the sawdust dryer cyclone (370) to separate the dried material from the air stream (product recovery). A variable

[1] While GHGs are not included under the definition of "regulated air pollutant" at A.A.C. R18-2-101.122, they are considered a "regulated NSR pollutant" under the PSD program at 40 CFR 52.21(b)(50) and therefore included here for informational purposes.

percentage of the airstream is returned to the process with approximately 10,000 dry standard cubic feet per minute (dscfm) actually being exhausted through the cyclone's stack. The dried material is then sent for processing in the Pellet Production Area (see Section 3.1.3).

The fines from the bagging fines cyclone, as described in Section 3.1.4, are stored in the fuel bin (720). This fine material is ground even finer, as necessary, by the fuel hammermill (730) and blown into the sawdust dryer burner (345). Diesel fuel ignited by a propane pilot flame is combusted together with the wood only during cold startups. The propane burns for only a few minutes to ignite the diesel fuel. Once operating temperatures are achieved (approximately 30 minutes), the diesel is turned off as it is no longer required to sustain wood fuel combustion.

3.1.3 Pellet Production Area (456)

Dry material from dry raw material storage and the Sawdust Drying Area (see Section 3.1.2) is transferred from the storage pile to the KD feed bin (210) using a front-end loader and transferred by KC Collection Conveyor (220), KD bucket elevator (230), KD Collection Screw #1 (240), KD Collection Screw #2 (249), and KD Collection Screw #3 (250) to the dry hammermill (261) to reduce the material to less than one-quarter inch in size. Reduced material from the dry hammermill is conditioned with water, as necessary, to achieve the required moisture content for milling. The conditioned material is transferred by three screw conveyors (262, 263, and 270) and a bucket elevator (264) to the three pellet mills (450, 490, and 496) to form the pellets.

The pellet moisture vent (505) collects steam at each of the pellet mill discharges and vents the moisture outside of the building. The pellets are transferred by two belt conveyors (510 and 520) and a bucket elevator (530) to an aspirator (540) to remove any dust from the pellets and are then processed in a pellet cooler (550) where ambient air is pulled through the pellets. After cooling, the pellets are transferred by pellet weight screw (542), belt conveyor (543) and bucket elevator (544) to a storage silo (510). Pellets destined for animal bedding are gravity fed to the pellet crumbler (815). Whole pellets and crumbled pellets are then sent for processing in the Pellet Screening & Packaging Area (see Section 3.1.4).

PM, PM_{10}, and $PM_{2.5}$ emissions from the dry hammermill, aspirator, pellet cooler, and screen process air are controlled by the following pollution control devices:

- Dry Hammermill Cyclone (265) – exhausted to the atmosphere.
- Pellet Cooler Cyclone (552) – exhausted to the atmosphere.
- Bagging Fines Cyclone (740) – exhausted to the atmosphere.

3.1.4 Pellet Screening & Packaging Area (10)

Pellets from the Pellet Production Area (see Section 3.1.3) are gravity fed to a screen (817) and then transferred by belt conveyor (830) to bagging equipment where they are automatically weighed and dispensed into bi-fold poly bags formed by the bagging equipment from preprinted rolls of film. Filled bags are automatically sealed, semi-automatically palletized, and weather protected to complete the packaging process. Pallets of weather-protected bags are stored in the yard prior to being shipped to

distribution points offsite. Pellets are also occasionally loaded into bulk trucks or other containers for distribution.

PM, PM_{10}, and $PM_{2.5}$ emissions from packaging operations are controlled by the following pollution control device:

- Bagging Fines Cyclone (740) – exhausted to the atmosphere.

3.2 EQUIPMENT SUBJECT TO PERMITTING

The equipment associated with the Forest Energy Corporation facility that is subject to air quality permitting through ADEQ is presented in Table 3.1. Further detailed information about the equipment (maximum rated capacity, make, model, serial number, and date of manufacturer) is presented in Appendix B. Table 3.1 also presents the Source Classification Code (SCC) associated with each piece of equipment subject to air quality permitting as well as a reference to the applicable state (A.A.C.) and federal (New Source Performance Standards [NSPS] and National Emission Standards for Hazardous Air Pollutants [NESHAP]) requirements. Further details about the applicable requirements are presented in Section 8.

All other equipment at the Forest Energy Corporation facility that is not identified in Table 3.1 is either an insignificant activity as defined in A.A.C. R18-2-101.68 or a trivial activity as defined in A.A.C. R18-2-101.146. Further information about these types of equipment or activities is presented in Section 9.

Table 3.1 Equipment Subject to Air Quality Permitting

EQUIPMENT ID NUMBER	EQUIPMENT DESCRIPTION	SCC	APPLICABLE REQUIREMENTS REFERENCE		
			STATE	NSPS	NESHAP
Wood Grinding Area 124					
631	Feed Bin	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
640	Screw Conveyor	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
651	Wet Hammermill w/Electric Motor	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
Sawdust Drying Area 123					
720	Fuel Bin	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
730	Fuel Hammermill	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
310	Dryer Infeed Bin	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
325	Screw Conveyor	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
320	Belt Conveyor	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--

Table 3.1 Equipment Subject to Air Quality Permitting

EQUIPMENT ID NUMBER	EQUIPMENT DESCRIPTION	SCC	APPLICABLE REQUIREMENTS REFERENCE		
			STATE	NSPS	NESHAP
340	Sawdust Dryer	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
345	Sawdust Dryer Burner	3-07-999-98	A.A.C. R18-2-306.01 A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
370	Sawdust Dryer Cyclone [a]	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
Pellet Production Area 456					
210	KD Feed Bin	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
220	KD Collection Conveyor	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
230	KD Bucket Elevator	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
240	KD Collection Screw #1	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
249	KD Collection Screw #2	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--

Table 3.1 Equipment Subject to Air Quality Permitting

EQUIPMENT ID NUMBER	EQUIPMENT DESCRIPTION	SCC	APPLICABLE REQUIREMENTS REFERENCE		
			STATE	NSPS	NESHAP
250	KD Collection Screw #3	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
261	Dry Hammermill w/Electric Motor	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
265	Dry Hammermill Cyclone [b]	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
262	Screw Conveyor	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
263	Screw Conveyor	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
270	Screw Conveyor	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
264	Bucket Elevator	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
450	Pellet Mill #1 w/Electric Motor	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
490	Pellet Mill #2 w/Electric Motor	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--

Table 3.1 Equipment Subject to Air Quality Permitting

EQUIPMENT ID NUMBER	EQUIPMENT DESCRIPTION	SCC	APPLICABLE REQUIREMENTS REFERENCE		
			STATE	NSPS	NESHAP
496	Pellet Mill #3 w/Electric Motor	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
510	Belt Conveyor	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
520	Belt Conveyor	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
530	Bucket Elevator	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
540	Aspirator	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
550	Pellet Cooler	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
552	Pellet Cooler Cyclone [b]	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
505	Pellet Moisture Vent	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
542	Pellet Weight Screw	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--

Table 3.1 Equipment Subject to Air Quality Permitting

EQUIPMENT ID NUMBER	EQUIPMENT DESCRIPTION	SCC	APPLICABLE REQUIREMENTS REFERENCE		
			STATE	NSPS	NESHAP
543	Belt Conveyor	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
544	Bucket Elevator	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
810	Pellet Cooler Silo	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
815	Pellet Crumbler	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
Pellet Screening & Packaging Area 10					
817	Screen	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
830	Belt Conveyor	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--
740	Bagging Fines Cyclone [b]	3-07-999-98	A.A.C. R18-2-702.B.3 A.A.C. R18-2-730	--	--

[a] The cyclone serves as both a product recovery device and a pollution control device.

[b] The pollution control device is not an affected facility subject to A.A.C. R18-2-702.B.3 and A.A.C. R18-2-730 (Standards of Performance for Unclassified Sources). Instead, it controls affected facilities subject to A.A.C. R18-2-702.B.3 and A.A.C. R18-2-730 and is used to ensure compliance with the requirements of A.A.C. R18-2-702.B.3 and A.A.C. R18-2-730.

4 DESCRIPTION OF ALTERNATE OPERATING SCENARIOS

Forest Energy Corporation is not currently permitted to operate any alternate operating scenarios (AOSs) and does not propose to add any AOS as part of this Class II Permit Renewal Application.

5 IDENTIFICATION AND DESCRIPTION OF POLLUTION CONTROLS

5.1 IDENTIFICATION, DESCRIPTION, AND LOCATION

Identification and description of the pollution control equipment utilized at the Forest Energy Corporation facility is presented in Table 5.1. The general location of the pollution control equipment is shown in the process flow diagrams presented in Appendix D.

Other compliance activities are presented in the tables of Section 8.

5.2 RATED AND OPERATING EFFICIENCIES

The rated and operating efficiencies of the air pollution control equipment/methods used at the Forest Energy Corporation facility are presented in Table 5.1.

5.3 REFERENCE TO APPLICABLE TEST METHODS

The requirements applicable to each process and/or piece of equipment at the Forest Energy Corporation facility are identified in Table 3.1 and described in Tables 8.1 through 8.4. The applicable test methods that can be used to determine compliance with the applicable emission standards include:

- Opacity Standard: Environmental Protection Agency (EPA) Reference Method 9, EPA Reference Method 22, or Visible Emission Surveys;
- PM Emission Standard: EPA Reference Method 5 and (if necessary) EPA Reference Method 202;
- PM_{10} Emission Standard: EPA Reference Method 201 or 201A and (if necessary) EPA Reference Method 202 (alternately EPA Reference Method 5 can be used with the assumption that all particulate collected is PM_{10});
- CO Emission Standard: EPA Reference Method 10;
- NO_X Emission Standard: EPA Reference Method 7E;
- SO_2 Emission Standard EPA Reference Method 6 or 6C; and
- VOC Emission Standard: EPA Reference Method 25A.

Table 5.1 Summary of Air Pollution Control Methods and Equipment

PROCESS NUMBER	IDENTIFICATION OF CONTROL METHOD OR EQUIPMENT	EMISSION UNIT(S) CONTROLLED	POLLUTANTS CONTROLLED	VOLUNTARY EMISSION LIMITS	EXHAUST FLOW RATE	RATED/ OPERATING EFFICIENCY
370	Sawdust Dryer Cyclone	Sawdust Dryer	PM, PM_{10}, $PM_{2.5}$	11.1 lbs PM_{10}/hr	65,000 cubic feet per minute (cfm)	N/A [a]
265	Dry Hammermill Cyclone	Dry Hammermill	PM, PM_{10}, $PM_{2.5}$	None	6,000 cfm	N/A [a]
552	Pellet Cooler Cyclone	Pellet Cooler	PM, PM_{10}, $PM_{2.5}$	None	15,000 cfm	N/A [a]
740	Bagging Fines Cyclone	Bagging Equipment	PM, PM_{10}, $PM_{2.5}$	None	3,000 cfm	80 / 60 / 20% [b]

[a] Because PM, PM_{10}, and $PM_{2.5}$ emissions are calculated using the PM_{10} emission limitation included in the current permit, no control efficiency is applied in the emission calculations and no control efficiency requirement is specified in the permit.

[b] The control efficiency is based on EPA's Air Pollution Control Technology Fact Sheet (EPA-452/F-03-005). The average collection efficiency provided for a conventional single cyclone is 80% for PM, 60% for PM_{10}, and 20% for $PM_{2.5}$.

6 EMISSIONS CALCULATIONS

6.1 EMISSIONS FROM EACH PROCESS

Detailed information about the individual emission units associated with operations at the Forest Energy Corporation facility is identified in Tables 6.1 through 6.4. This information includes: (a) the identification of the regulated air pollutants emitted; (b) the classification of emissions as fugitive or non-fugitive; and (c) quantification of potential emissions. Table 6.1 presents PM, PM_{10}, and $PM_{2.5}$ emissions on an hourly (pounds per hour [lb/hr]) and annual (tpy) basis, Table 6.2 presents CO, NO_X, SO_2, and VOC emissions on an hourly and annual basis, Table 6.3 presents GHG (i.e., CO_2, CH_4, N_2O, and CO_2e) emissions on an hourly and annual basis, Table 6.4 presents HAP emissions on an hourly and annual basis. The emission units listed in Tables 6.1 through 6.4 exclude the insignificant emission units/activities and trivial emission units/activities presented in Section 9.

6.2 FACILITY-WIDE EMISSIONS AND PTE

The sum of potential emissions from the emission units at the Forest Energy Corporation facility is presented in Table 6.5. The PTE of the entire Forest Energy Corporation facility is presented in Table 6.6.

The primary activity of the Forest Energy Corporation facility is reconstituted wood products, which is not a “categorical source”, or a “Section 302(j) category” source as defined in A.A.C. R18-2-101.23 and R18-2-101.129, respectively. Therefore, only non-fugitive emissions are included in the determination of the facility-wide PTE of regulated air pollutants (except HAPs and emissions from the embedded categorical source).

As shown in Table 6.6, the PTE of facility-wide operations is greater than the Class II permitting thresholds, but less than the Class I (Title V) major source permitting thresholds, the Prevention of Significant Deterioration (PSD) major source thresholds (for a non-categorical source in an attainment/ unclassifiable area), and the HAP major source thresholds. Consequently, the Forest Energy Corporation facility is a non-Title V, minor PSD, and minor HAP source in accordance with the A.A.C.

6.3 EMISSION FACTOR DOCUMENTATION

The methodology used to calculate potential emissions from the emission unit addressed in Section 6.1 is presented in Appendix E.

6.4 ELECTRONIC COPY OF EMISSION CALCULATIONS

An electronic copy of the emission calculations will be provided via email with this application. The Excel spreadsheets used to calculate emissions are reproduced in Appendix F.

Table 6.1 Identification and Description of Emission Unit and Particulate Potential Emissions

PROCESS NUMBER	EMISSION UNIT DESCRIPTION	NON-FUGITIVE OR FUGITIVE CLASSIFICATION	HOURLY POTENTIAL EMISSIONS (LBS/HR)			ANNUAL POTENTIAL EMISSIONS (TPY)		
			PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
Wet	Unloading to Wet Raw Material Storage Pile	Fugitive	0.02	0.008	0.001	0.001	0.0005	0.00007
Dry	Unloading to Dry Raw Material Storage Pile	Fugitive	0.04	0.02	0.002	0.002	0.001	0.0001
Wind	Wind Erosion of Wet Raw Material Storage Pile	Fugitive	0.0008	0.0004	0.0002	0.003	0.002	0.0009
Wind	Wind Erosion of Dry Raw Material Storage Pile	Fugitive	0.0008	0.0004	0.0002	0.003	0.002	0.0009
Wet	Material Transfer to Feed Bin	Non-Fugitive	0.006	0.003	0.0004	0.03	0.01	0.002
Sawdust Drying Area 123								
Dry	Material Transfer to Fuel Bin	Non-Fugitive	0.003	0.001	0.0002	0.01	0.006	0.0009
Wet	Material Transfer to Dryer Infeed Bin	Non-Fugitive	0.006	0.003	0.0004	0.03	0.01	0.002
Wet	Material Transfer to Sawdust Dryer	Non-Fugitive	0.006	0.003	0.0004	0.03	0.01	0.002
340 / 345 / 370	Sawdust Dryer and Sawdust Dryer Burner w/Cyclone	Non-Fugitive	11.10	11.10	11.10	48.62	48.62	48.62
Pellet Production Area 456								
Dry	Material Transfer to KD Feed Bin	Non-Fugitive	0.01	0.006	0.0008	0.05	0.02	0.004

Table 6.1 Identification and Description of Emission Unit and Particulate Potential Emissions

PROCESS NUMBER	EMISSION UNIT DESCRIPTION	NON-FUGITIVE OR FUGITIVE CLASSIFICATION	HOURLY POTENTIAL EMISSIONS (LBS/HR)			ANNUAL POTENTIAL EMISSIONS (TPY)		
			PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
Dry	Material Transfer to Dry Hammermill	Non-Fugitive	0.01	0.006	0.0008	0.05	0.02	0.004
261 / 265	Dry Hammermill w/Cyclone	Non-Fugitive	0.54	0.27	0.27	2.35	1.17	1.17
Dry	Conveyor to Conveyor Transfer	Non-Fugitive	0.01	0.006	0.0008	0.05	0.02	0.004
Dry	Material Transfer to Pellet Cooler	Non-Fugitive	0.01	0.006	0.0008	0.05	0.02	0.004
550 / 552	Pellet Cooler w/Cyclone	Non-Fugitive	3.35	1.91	1.91	14.68	8.37	8.37
Dry	Material Transfer to Storage Silo	Non-Fugitive	0.01	0.006	0.0008	0.05	0.02	0.004
Pellet Screening & Packaging Area 10								
Dry	Material Transfer to Bagging Equipment	Non-Fugitive	0.01	0.006	0.0008	0.05	0.02	0.004
817 / 740	Screening and Bagging Equipment w/Cyclone	Non-Fugitive	0.005	0.003	0.005	0.02	0.01	0.02
TOTAL OF NON-FUGITIVE EMISSIONS			**15.09**	**13.33**	**13.29**	**66.08**	**58.37**	**58.22**
TOTAL OF FUGITIVE EMISSIONS			**0.06**	**0.03**	**0.00**	**0.01**	**0.00**	**0.00**
TOTAL OF NON-FUGITIVE AND FUGITIVE EMISSIONS			**15.14**	**13.35**	**13.30**	**66.09**	**58.37**	**58.22**

Table 6.2 Identification and Description of Emission Unit and CO, NO_X, SO_2, and VOC Potential Emissions

PROCESS NUMBER	EMISSION UNIT DESCRIPTION	NON-FUGITIVE OR FUGITIVE CLASSIFICATION	HOURLY POTENTIAL EMISSIONS (LBS/HR)				ANNUAL POTENTIAL EMISSIONS (TPY)			
			CO	NO_X	SO_2	VOC	CO	NO_X	SO_2	VOC
Sawdust Drying Area 123										
340 / 345 / 370	Sawdust Dryer Burner w/Cyclone - Wood Combustion	Non-Fugitive	5.44	4.64	0	7.20	23.83	20.32	0	31.54
TOTAL OF NON-FUGITIVE EMISSIONS			**5.44**	**4.64**	**0.00**	**7.20**	**23.83**	**20.32**	**0.00**	**31.54**
TOTAL OF FUGITIVE EMISSIONS			**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL OF NON-FUGITIVE AND FUGITIVE EMISSIONS			**5.44**	**4.64**	**0.00**	**7.20**	**23.83**	**20.32**	**0.00**	**31.54**

Table 6.3 Identification and Description of Emission Unit and CO_2, CH_4, N_2O, and CO_2e Potential Emissions

PROCESS NUMBER	EMISSION UNIT DESCRIPTION	NON-FUGITIVE OR FUGITIVE CLASSIFICATION	HOURLY POTENTIAL EMISSIONS (LBS/HR)				ANNUAL POTENTIAL EMISSIONS (TPY)			
			CO_2	CH_4	N_2O	CO_2e	CO_2	CH_4	N_2O	CO_2e
Sawdust Drying Area 123										
340 / 345 / 370	Sawdust Dryer Burner w/Cyclone - Wood Combustion	Non-Fugitive	6,205	0.48	0.24	6,288	27,177	2.09	1.04	27,540
TOTAL OF NON-FUGITIVE EMISSIONS			**6,205**	**0.48**	**0.24**	**6,288**	**27,177**	**2.09**	**1.04**	**27,540**
TOTAL OF FUGITIVE EMISSIONS			**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL OF NON-FUGITIVE AND FUGITIVE EMISSIONS			**6,205**	**0.48**	**0.24**	**6,288**	**27,177**	**2.09**	**1.04**	**27,540**

Table 6.4 Identification and Description of Emission Unit and HAP Potential Emissions

PROCESS NUMBER	EMISSION UNIT DESCRIPTION	NON-FUGITIVE OR FUGITIVE CLASSIFICATION	HOURLY POTENTIAL EMISSIONS (LBS/HR)			ANNUAL POTENTIAL EMISSIONS (TPY)		
			GREATEST SINGLE HAP [a]	LEAD	HAPs	GREATEST SINGLE HAP [a]	LEAD	HAPs
Sawdust Drying Area 123								
340 / 345 / 370	Sawdust Dryer Burner w/Cyclone - Wood Combustion	Non-Fugitive	0.13	0	0.56	0.58	0	2.45
TOTAL OF NON-FUGITIVE EMISSIONS			**0.13**	**0**	**0.56**	**0.58**	**0**	**2.45**
TOTAL OF FUGITIVE EMISSIONS			**0**	**0**	**0**	**0**	**0**	**0**
TOTAL OF NON-FUGITIVE AND FUGITIVE EMISSIONS			**0.13**	**0**	**0.56**	**0.58**	**0**	**2.45**

[a] Formaldehyde has the greatest potential emissions of any single facility-wide HAP on an annual and hourly basis.

Table 6.5 Summary of Facility-Wide Potential Emissions

REGULATED AIR POLLUTANT EMITTED	HOURLY EMISSIONS (LBS/HR)			ANNUAL EMISSIONS (TPY)		
	NON-FUGITIVE EMISSIONS	FUGITIVE EMISSIONS	TOTAL EMISSIONS	NON-FUGITIVE EMISSIONS	FUGITIVE EMISSIONS	TOTAL EMISSIONS
PM	15.09	0.06	15.14	66.08	0.01	66.09
PM_{10}	13.33	0.03	13.35	58.37	0.005	58.37
$PM_{2.5}$	13.29	0.004	13.30	58.22	0.002	58.22
CO	5.44	0	5.44	23.83	0	23.83
NO_X	4.64	0	4.64	20.32	0	20.32
SO_2	0	0	0	0	0	0
VOC	7.20	0	7.20	31.54	0	31.54
CO_2e [a]	6,288	0	6,288	27,540	0	27,540
Greatest Single HAP [b]	0.13	0	0.13	0.58	0	0.58
Lead	0	0	0	0	0	0
Total HAPs	0.56	0	0.56	2.45	0	2.45

[a] CO_2e emissions are calculated by summing the individual greenhouse gas emissions multiplied by their GWP. GWP of CO_2 = 1, GWP of CH_4 = 25, GWP of N_2O = 298.

[a] Methanol has the greatest potential emissions of any single facility-wide HAP on an annual and hourly basis.

Table 6.6 Potential to Emit and Threshold Comparison

REGULATED AIR POLLUTANT EMITTED	FACILITY-WIDE PTE (TPY) [a]	THRESHOLDS (TPY)			
		CLASS II PERMITTING	TITLE V MAJOR SOURCE PERMITTING	HAP MAJOR SOURCE	PSD MAJOR SOURCE
PM	66.08	25		--	250
PM_{10}	58.37	15	100	--	250
$PM_{2.5}$	58.22	10	100	--	250
CO	23.83	100	100	--	250
NO_X	20.32	40	100	--	250
SO_2	0	40	100	--	250
VOC	31.54	40	100	--	250
CO_2e [b]	27,540	--	--	--	--
Lead	0	0.6	--	10	250
Greatest Single HAP [c]	0.58	--	--	10	--
Total HAPs	2.45	--	--	25	--

[a] Except for HAPs, the PTE includes all non-fugitive emission units. For HAPs, the PTE includes all non-fugitive and fugitive emission units.

[b] CO_2e emissions are calculated by summing the individual greenhouse gas emissions multiplied by their global warming potential (GWP). GWP of CO_2 = 1, GWP of CH_4 = 25, GWP of N_2O = 298.

[c] The greatest single HAP for the Forest Energy Corporation facility is methanol.

7 PROPOSED VOLUNTARY LIMITATIONS

The previously accepted voluntary limitations in Class II Air Quality Permit #73803 that Forest Energy Corporation proposes to retain in its renewal permit are presented in Table 7.1. The associated monitoring, recordkeeping, and reporting requirements necessary to demonstrate that the voluntary limitations are permanent, quantifiable, and otherwise enforceable as a practical matter are also presented in Table 7.1.

Table 7.1 Previously Accepted Voluntary Limitations to Be Retained

PROCESS NUMBER	EMISSION UNIT OR ASSOCIATED POLLUTION CONTROL DEVICE [a]	DESCRIPTION OF VOLUNTARY LIMITATION	PROPOSED MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS
345	Sawdust Dryer Burner	$PM_{10} \leq 11.1$ lbs/hr	Perform periodic opacity monitoring and complete performance testing

8 APPLICABLE REQUIREMENTS AND PROPOSED EXEMPTIONS FROM OTHERWISE APPLICABLE REQUIREMENTS

8.1 APPLICABLE REQUIREMENTS

Identification of the specific regulatory requirements applicable to each process and/or piece of equipment at the Forest Energy Corporation facility is presented in Table 3.1. Detailed descriptions of the regulatory requirements identified in Table 3.1 are presented in Tables 8.2 through 8.4. General facility-wide requirements are presented in Table 8.1. The methods used by Forest Energy Corporation to determine compliance with the applicable regulatory requirements are also presented in Tables 8.1 through 8.4[3].

The requirements of 40 Code of Federal Regulations (CFR) 98 (Mandatory Greenhouse Gas Reporting) are not included in Table 8.1 because Forest Energy Corporation does not meet the applicability requirements of 40 CFR 98.2(a)(3)(iii). If combined actual emissions from all stationary fuel combustion sources at the Forest Energy Corporation facility ever equals or exceeds 25,000 metric tons of CO_2e in a given year, Forest Energy Corporation will comply with the applicable reporting requirements of 40 CFR 98.

8.2 PROPOSED EXEMPTION FROM OTHERWISE APPLICABLE REQUIREMENTS

Forest Energy Corporation does not propose to be exempt from any otherwise applicable regulatory requirement.

[3] While identification of the specific regulatory requirements and the methods used to determine compliance is not required by Section 3.2, Standard Class II Permit Application Components of ADEQ's Application Packet for Class II Permit, it is included as part of the application for purposes of clarification and completeness.

Table 8.1 Applicable Facility-Wide Regulatory Requirements and Methods for Demonstrating Compliance

REGULATORY CITATION FOR APPLICABLE REQUIREMENTS	DESCRIPTION OF REQUIREMENTS	METHODS USED TO DEMONSTRATE COMPLIANCE
A.A.C. R18-2-309.2.a	Submit compliance certification no less frequently than annually.	Record of compliance certification submittals.
A.A.C. R18-2-310.01.A	Report excess emissions in two parts: a) Notification by telephone or fax within 24 hours of first learning of excess emissions that includes all available information from A.A.C. R18-2-310.01.B, and b) Submittal of a written report within 72 hours of the telephone or fax notification that contains the information required by A.A.C. R18-2-310.01.B.	Facility procedures; training; records of submittals.
A.A.C. R18-2-315.A	Post the permit or certificate of permit issuance at the equipment site in such a manner as to be clearly visible and accessible. Mark all equipment covered by the permit with the current permit number or a serial number or other equipment number that is also listed in the permit to identify that piece of equipment.	Inspection confirming permit posting. Inspection confirming all equipment covered by the permit is clearly marked with the permit equipment ID number.
A.A.C. R18-2-315.B	Maintain a complete copy of the permit on the site.	Inspection confirming complete permit is maintained onsite.
A.A.C. R18-2-326	Payment of applicable fees.	Records of fees paid pursuant to A.A.C. R18-2-326.D.
A.A.C. R18-2-327.A	Submit emission inventory questionnaires.	Records of Annual Emissions Inventory Questionnaires submitted to the Director by the due date.
A.A.C. R18-2-602	Receive authority to conduct open burning by obtaining a permit from the Director or delegated authority. Meet all requirements of the open burning permit.	Records of open burning permits; and facility procedures.

Table 8.1 Applicable Facility-Wide Regulatory Requirements and Methods for Demonstrating Compliance

REGULATORY CITATION FOR APPLICABLE REQUIREMENTS	DESCRIPTION OF REQUIREMENTS	METHODS USED TO DEMONSTRATE COMPLIANCE
A.A.C. R18-2-604 A.A.C. R18-2-605 A.A.C. R18-2-606 A.A.C. R18-2-607 A.A.C. R18-2-608	Implementation of reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne from: a) Open spaces; b) Plant roads and streets; c) Material handling operations; d) Storage piles; and e) Mineral tailings. Any affected facility subject to regulation under Article 7 or Article 9 of Title 18, Chapter 2 of the A.A.C. is not subject to the regulations under Article 6.	Fugitive dust plan; facility procedures; records of activities and associated control measures.
A.A.C. R18-2-614	For all nonpoint sources as defined in A.A.C. R18-2-101.94: • Opacity ≤ 40% An open fire permitted under A.A.C. R18-2-602 or regulated under Article 15 of Title 18, Chapter 2 of the A.A.C. is exempt from this requirement.	Fugitive dust plan; facility procedures; records of visible emission surveys.
A.A.C. R18-2-726	Do not cause or permit sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Examples of good modern practices include wet blasting and the use of effective enclosures with necessary dust collecting equipment.	Facility procedure; records of abrasive blasting projects and good modern practices.

Table 8.1 Applicable Facility-Wide Regulatory Requirements and Methods for Demonstrating Compliance

REGULATORY CITATION FOR APPLICABLE REQUIREMENTS	DESCRIPTION OF REQUIREMENTS	METHODS USED TO DEMONSTRATE COMPLIANCE
A.A.C. R18-2-727.A	Do not conduct any spray paint operation without minimizing organic solvent emissions. Such operations other than architectural coating and spot painting, must be conducted in an enclosed area equipped with controls containing no less than 96% of the overspray.	Facility procedures; records of spray-painting projects, control measures employed, Safety Data Sheets (SDS) for all paints and solvents, and amount of paint consumed.
A.A.C. R18-2-727.B	Do not: a) Employ, apply, evaporate or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or b) Thin or dilute any architectural coating with a photochemically reactive solvent.	Facility procedure.
A.A.C. R18-2-727.C	For purposes of A.A.C. R18-2-727.B, a photochemically reactive solvent is any solvent with an aggregate of more than 20% of its total volume composed of the following chemical compounds, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent: a) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation -- hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5%. b) A combination of aromatic compounds with 8 or more carbon atoms to the molecule except ethylbenzene: 8%. c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichlorethylene or toluene: 20%.	Explanatory statement of law.

Table 8.1 Applicable Facility-Wide Regulatory Requirements and Methods for Demonstrating Compliance

REGULATORY CITATION FOR APPLICABLE REQUIREMENTS	DESCRIPTION OF REQUIREMENTS	METHODS USED TO DEMONSTRATE COMPLIANCE
A.A.C. R18-2-727.D	Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups or organic compounds described in A.A.C. R18-2-727.C, it must be considered to be a member of the group having the least allowable percent of the total volume of solvents.	Explanatory statement of law.

Table 8.2 Applicable Regulatory Requirements of A.A.C. R18-2-306.01 and Methods for Demonstrating Compliance

REGULATORY CITATION FOR APPLICABLE REQUIREMENTS	DESCRIPTION OF REQUIREMENTS	METHODS USED TO DEMONSTRATE COMPLIANCE
A.A.C. R18-2-306.01	The Permittee shall limit the emissions of Particulate Matter less than 10 micrometers in diameter (PM10) to 11.1 pounds per hour from the Sawdust Dryer Burner.	Records of performance tests; O&M plans; facility procedures; O&M records.

Table 8.3 Applicable Regulatory Requirements of A.A.C. R18-2-702.B.3 and Methods for Demonstrating Compliance

REGULATORY CITATION FOR APPLICABLE REQUIREMENTS	DESCRIPTION OF REQUIREMENTS	METHODS USED TO DEMONSTRATE COMPLIANCE
A.A.C. R18-2-702.B.3 A.A.C. R18-2-702.C	For all sources described in A.A.C. R18-2-702.A (except as otherwise provided in Title 18, Chapter 2 of the A.A.C. relating to specific types of sources): Opacity ≤ 20% If the presence of uncombined water is the only reason for an exceedance of the opacity limit, the exceedance shall not constitute a violation.	Facility procedure; records of monthly visual surveys; records of Method 9 observations.

Table 8.4 Applicable Regulatory Requirements of A.A.C. R18-2-730 and Methods for Demonstrating Compliance

REGULATORY CITATION FOR APPLICABLE REQUIREMENTS	DESCRIPTION OF REQUIREMENTS	METHODS USED TO DEMONSTRATE COMPLIANCE
A.A.C. R18-2-730.A.1 A.A.C. R18-2-730.B	$PM \leq 4.10\ P^{0.67}$, when $P \leq 30$ tph PM ≤ 55.0 P0.11 - 40, when P > 30 tph (where PM = maximum allowable PM emission rate in lbs/hr, P = total process rate in tons/hr). The total process weight from all similar units employing a similar type process shall be used for determining the maximum allowable emission of PM.	Records of process weight rates, PM limits, test results, and PTE calculations.
A.A.C. R18-2-730.D	Operate equipment, processes, and premises such that gaseous or odorous materials are not emitted in such quantities or concentrations as to cause air pollution.	O&M plans; facility procedures; O&M records; facility configuration; review of odor complaints.
A.A.C. R18-2-730.F	Processing, storage, usage, and transportation of solvents or other volatile compounds, paints, acids, alkalis, pesticides, fertilizers and manure in such a manner and by such means that they will not evaporate, leak, escape, or otherwise be discharged into the ambient air as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, install and use such control methods, devices, or equipment.	O&M plan; facility procedures; O&M records; facility configuration; review of odor complaints.
A.A.C. R18-2-730.G	If required by the Director, install abatement equipment or alter the stack, vent, or other outlet to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to adjoining property.	Explanatory statement of law.

9 INSIGNIFICANT AND TRIVIAL ACTIVITY INFORMATION

The proposed insignificant activities associated with the Forest Energy Corporation facility are presented in Table 9.1. Pursuant to A.A.C. R18-2-304.F.8, insignificant activities shall be listed in a permit application, but the application need not provide emissions data, except as requested by ADEQ following submittal of the application. Therefore, any emissions from the equipment and activities presented in Table 9.1 are not considered in this application.

The proposed trivial activities associated with the Forest Energy Corporation facility are presented in Table 9.2. Although trivial activities can be omitted from permit applications, Forest Energy Corporation is identifying them in this application for ADEQ's concurrence and future reference purposes. Table 9.2 is not intended to be an exhaustive list of all the equipment and activities at the Forest Energy Corporation facility that meet the trivial activities classification.

Table 9.1 Proposed Insignificant Activities

PROPOSED INSIGNIFICANT ACTIVITY	INSIGNIFICANT ACTIVITY REFERENCE
Diesel Fuel and Fuel Oil Storage Tanks with a Capacity of 40,000 Gallons or Less	A.A.C. R18-2-101.68.a.i
Lubricating Oil, Transformer Oil, and Used Oil Storage Tanks	A.A.C. R18-2-101.68.a.i
Storage and Piping of Natural Gas, Butane, Propane, or Liquefied Petroleum Gas	A.A.C. R18-2-101.68.a.iii
Piping of Fuel Oils, Used Oil and Transformer Oil	A.A.C. R18-2-101.68.a.iv
Storage and Handling of Drums or Other Transportable Containers where the Containers are Sealed During Storage, and Covered During Loading and Unloading, Including Containers of Waste and Used Oil	A.A.C. R18-2-101.68.a.v
Storage Tanks Containing Exclusively Soaps, Detergents, Waxes, Greases, Aqueous Salt Solutions, Aqueous Solutions of Acids That Are Not Regulated Air Pollutants, or Aqueous Caustic Solutions	A.A.C. R18-2-101.68.a.vi
Housekeeping Activities and Associated Products Used for Cleaning Purposes, Including Collecting Spilled and Accumulated Materials at the Source, Including Operation of Fixed Vacuum Cleaning Systems Specifically for Such Purposes.	A.A.C. R18-2-101.68.d.i
Architectural Painting and Associated Surface Preparation for Maintenance Purposes at Industrial or Commercial Facilities	A.A.C. R18-2-101.68.d.iv
General Office Activities, Such as Paper Shredding, Copying, Photographic Activities, and Blueprinting, but Not to Include Incineration	A.A.C. R18-2-101.68.f.i
Use of Consumer Products, Including Hazardous Substances Where the Product Is Used at a Source in the Same Manner as Normal Consumer Use	A.A.C. R18-2-101.68.f.ii
Transformer Vents	A.A.C. R18-2-101.68.g.ii

Table 9.2 Proposed Trivial Activities

PROPOSED TRIVIAL ACTIVITY	TRIVIAL ACTIVITY REFERENCE
Combustion Emissions from Propulsion of Mobile Sources	A.A.C. R18-2-101.146.a.i
Hand-Held or Manually Operated Equipment Used for Buffing, Polishing, Carving, Cutting, Drilling, Sawing, Grinding, Turning, Routing or Machining of Ceramic Art Work, Precision Parts, Leather, Metals, Plastics, Fiberboard, Masonry, Carbon, Glass, or Wood	A.A.C. R18-2-101.146.b.ii
Brazing, Soldering, and Welding Equipment, and Cutting Torches Related to Manufacturing and Construction Activities That Do Not Result in Emission of HAP Metals	A.A.C. R18-2-101.146.b.iii
Air Compressors and Pneumatically Operated Equipment, Including Hand Tools	A.A.C. R18-2-101.146.b.v
Batteries and Battery Charging Stations	A.A.C. R18-2-101.146.b.vi
Equipment Used for Surface Coating, Painting, Dipping, or Spraying Operations, Except Those That Will Emit VOC or HAPs	A.A.C. R18-2-101.146.b.x
Process Water Filtration Systems and Demineralizers	A.A.C. R18-2-101.146.b.xv
Demineralized Water Tanks and Demineralizer Vents	A.A.C. R18-2-101.146.b.xvi
Electric Motors	A.A.C. R18-2-101.146.b.xxiv
Plant and Building Maintenance and Upkeep Activities, Including Grounds-Keeping, General Repairs, Cleaning, Painting, Welding, Plumbing, Re-Tarring Roofs, Installing Insulation, and Paving Parking Lots	A.A.C. R18-2-101.146.c.i
Repair or Maintenance Shop Activities not Related to the Primary Business Activity and not Including Emissions from Surface Coating, De-Greasing, or Solvent Metal Cleaning Activities	A.A.C. R18-2-101.146.c.ii
Janitorial Services and Consumer Use of Janitorial Products	A.A.C. R18-2-101.146.c.iii
Landscaping Activities	A.A.C. R18-2-101.146.c.iv
Sanding of Streets and Roads to Abate Traffic Hazards Caused by Ice and Snow	A.A.C. R18-2-101.146.c.vi
Caulking Operations Which Are Not Part of a Production Process	A.A.C. R18-2-101.146.c.viii
Air-Conditioning Units Used for Human Comfort That Do Not Have Applicable Requirements under Title VI of the Act	A.A.C. R18-2-101.146.d.i

Table 9.2 Proposed Trivial Activities

PROPOSED TRIVIAL ACTIVITY	TRIVIAL ACTIVITY REFERENCE
Ventilating Units Used for Human Comfort That Do Not Exhaust Air Pollutants into the Ambient Air From Any Manufacturing, Industrial or Commercial Process	A.A.C. R18-2-101.146.d.ii
Tobacco Smoking Rooms and Areas	A.A.C. R18-2-101.146.d.iii
Non-Commercial Food Preparation	A.A.C. R18-2-101.146.d.iv
General Office Activities, Such as Paper Shredding, Copying, Photographic Activities, Pencil Sharpening and Blueprinting	A.A.C. R18-2-101.146.d.v
Laundry Activities	A.A.C. R18-2-101.146.d.vi
Bathroom and Toilet Vent Emissions	A.A.C. R18-2-101.146.d.vii
Use of Consumer Products, Including Hazardous Substances Where the Product is Used at the Facility in the Same Manner as Normal Consumer Use	A.A.C. R18-2-101.146.d.ix
Circuit Breakers	A.A.C. R18-2-101.146.d.xi
Adhesive Use Which is Not Related to Production	A.A.C. R18-2-101.146.d.xii
Storage Tanks, Vessels, and Containers Holding or Storing Liquid Substances That Will Not Emit Any VOC or HAP	A.A.C. R18-2-101.146.e.i
Storage Tanks, Reservoirs, and Pumping and Handling Equipment of Any Size Containing Soaps, Vegetable Oil, Grease, Animal Fat, and Nonvolatile Aqueous Salt Solutions, If Appropriate Lids and Covers Are Used	A.A.C. R18-2-101.146.e.ii
Chemical Storage Associated with Water and Wastewater Treatment Where the Water is Treated for Consumption and/or Use Within the Permitted Facility (limited to chemicals not listed in 40 CFR 68.13, chemicals listed in 40 CFR 68.13 but stored in quantities less than threshold levels, and not subject to any applicable regulation under the Act or the Arizona Revised Statutes)	A.A.C. R18-2-101.146.e.iii
Storage Cabinets for Flammable Products	A.A.C. R18-2-101.146.e.v
Natural Gas Pressure Regulator Vents	A.A.C. R18-2-101.146.e.vi
Fire Suppression Systems	A.A.C. R18-2-101.146.g.i
Emergency Road Flares	A.A.C. R18-2-101.146.g.ii

Table 9.2 Proposed Trivial Activities

PROPOSED TRIVIAL ACTIVITY	TRIVIAL ACTIVITY REFERENCE
Water Treatment or Storage or Cooling Systems for Process Water	A.A.C. R18-2-101.146
The Collection, Transmission, Liquid Treatment and Solids Treatment Process, and Domestic Type Wastewater and Sewage Treatment Works, or Treatment Facilities, Including Septic Tank Systems Which Treat Only Domestic Type Wastewater and Sewage	A.A.C. R18-2-101.146
Waste Motor Oil Collection and Recycling	A.A.C. R18-2-101.146
Cleanup of Ditches	A.A.C. R18-2-101.146
Storm Water Drainage Control	A.A.C. R18-2-101.146
Manual Cleanup Around Conveyor Belts and Chutes	A.A.C. R18-2-101.146
Activities Associated with the Maintenance, Repair or Dismantlement of an Emission Unit, Including Preparation for Maintenance, Repair or Dismantlement and Preparation for Subsequent Startup, Including Preparation of a Shutdown Vessel for Entry, Replacement of Insulation, Welding and Cutting, and Steam Purging of a Vessel Prior to Startup	A.A.C. R18-2-101.146
Aerosol Can Usage	A.A.C. R18-2-101.146
Surface Impoundments Such as Ash Ponds, Cooling Ponds, Evaporation Ponds, Settling Ponds and Storm Water Ponds	A.A.C. R18-2-101.146
Production of Hot/Chilled Water for On-Site Use Not Related to Any Industrial Application and Not Using Fuel Burning Equipment	A.A.C. R18-2-101.146
General Vehicle Maintenance and Servicing Activities	A.A.C. R18-2-101.146
Equipment Transferring Material with Negligible Potential to Emit	A.A.C. R18-2-101.146
Lubricating System Reservoirs	A.A.C. R18-2-101.146
Hydraulic System Reservoirs	A.A.C. R18-2-101.146
Chemical Storage and Process Holding Tanks (limited to chemicals not listed in 40 CFR 68.13, chemicals listed in 40 CFR 68.13 but stored in quantities less than threshold levels, and not subject to any applicable regulation under the Act or the Arizona Revised Statutes)	A.A.C. R18-2-101.146
Use of Pesticides, Fumigants, and Herbicides	A.A.C. R18-2-101.146

Table 9.2 Proposed Trivial Activities

PROPOSED TRIVIAL ACTIVITY	TRIVIAL ACTIVITY REFERENCE
Maintenance, Repair or Dismantlement of Buildings, Utility Lines, Pipelines, Wells, and Other Structures that Do Not Constitute an Emissions Unit	A.A.C. R18-2-101.146
Pump/Motor Oil Reservoirs, Such as Gearbox Lubrication	A.A.C. R18-2-101.146
Filters and Membranes for Water Treatment	A.A.C. R18-2-101.146
Station Transformers	A.A.C. R18-2-101.146
Generation Unit Gas Vents	A.A.C. R18-2-101.146
Heat Exchangers (not including fuel burning equipment)	A.A.C. R18-2-101.146
Condenser/Moisture Trap/Mist Eliminator	A.A.C. R18-2-101.146
Stockpiles with Limited Potential for Wind Erosion (minimal fugitive dust due to large rock size, low silt content, and/or wetting with an acid solution)	A.A.C. R18-2-101.146
Anti-Freeze Storage Tanks	A.A.C. R18-2-101.146

10 COMPLIANCE SCHEDULE

At the time of this application's submittal, Forest Energy Corporation is in compliance with all applicable requirements except the requirement to submit a timely permit renewal application (R18-2-304.D.2). Following submittal of this application, Forest Energy corporation is in compliance with all applicable requirements and will continue to comply with such requirements.

11 MINOR NEW SOURCE REVIEW (NSR) APPLICABILITY DETERMINATION

According to A.A.C. R18-2-334.A.1, minor NSR applies to:

- Construction of any new Class I or Class II source, including the construction of any source requiring a Class II permit under A.A.C. R18-2-302.01.C.4; or
- Any minor NSR modification to a Class I or Class II source.

A minor NSR modification is:

1. Any physical change in or change in the method of operation of an emission unit or a stationary source that either:
    a. Increases the PTE of a regulated minor NSR pollutant by an amount greater than the permitting exemption thresholds; or
    b. Results in emissions of a regulated minor NSR pollutant not previously emitted by such emission unit or stationary source in an amount greater than the permitting exemption thresholds.
2. Construction of one or more new emissions units that have a PTE of regulated minor NSR pollutants at an amount greater than the permitting exemption threshold.

Forest Energy Corporation is not a new source. Furthermore, this application does not propose to construct any new emissions unit or make any physical change in or change in the method of operation of an existing emission unit or stationary source. Consequently, minor NSR does not apply.

12 IDENTIFICATION OF CONFIDENTIAL INFORMATION

Forest Energy Corporation does not claim confidentiality of any of the information presented in this application. All information can be made available to the public.

APPENDIX A STANDARD CLASS II PERMIT APPLICATION FORM

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
Air Quality Division
1110 West Washington • Phoenix, AZ 85007 • Phone: (602) 771-2338

STANDARD CLASS II PERMIT APPLICATION FORM

(As required by A.R.S. § 49-426, and Chapter 2, Article 3, Arizona Administrative Code)

1. Permit to be issued to (Business license name of organization that is to receive permit):
   Lignetics Group

2. Mailing Address: P.O. Box 2468
   City: Show Low State: Arizona ZIP: 85901

3. Name (or names) of Responsible Official: Jean Ziga
   Phone: 541.409.7335 Fax: 928.537.1661 Email: elaurance@lignetics.com

4. Facility Manager/Contact Person and Title: Joseph Guinn, Production Manager
   Phone: 928.537.1647 Fax: 928.537.1661 Email: jguinn@lignetics.com

5. Facility Name: Forest Energy Corporation – Show Low Facility
   Facility Location/Address (Current/Proposed): 1001 North 40th Street
   City: Show Low County: Navajo ZIP: 85901
   Indian Reservation (if applicable, which one): N/A
   Latitude/Longitude, Elevation: 34° 15' 15" N. Latitude / 110° 01' 41" W. Longitude, 6,415 feet

6. General Nature of Business: Manufacturing of wood fuel pellets and animal bedding.

7. Type of Organization:
   ■ Corporation ☐ Individual Owner ☐ Partnership ☐ Government Entity ☐ LLC
   ☐ Other

8. Permit Application Basis: ☐ New Source ☐ Revision ■ Renewal of Existing Permit
   For renewal or modification, include existing permit number (and exp. date): #73803, 01/17/2024
   Date of Commencement of Construction or Modification: N/A
   Primary Standard Industrial Classification Code: 2493 (Reconstituted Wood Products)

9. I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by ADEQ as public record. I also attest that I am in compliance with the applicable requirements of the Permit and will continue to comply with such requirements and any future requirements that become effective during the life of the Permit. I will present a certification of compliance to ADEQ no less than annually and more frequently if specified by ADEQ. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with Arizona Administrative Code, Title 18, Chapter 2 and any permit issued thereof.

   Signature of Responsible Official:

   Printed Name of Signer/Official Title: Jean Ziga, EHS Director, Lignetics Group

   Date: 10/18/2023 Telephone Number: 541-409-7335

APPENDIX B EQUIPMENT LIST

Table B.1 Equipment List

TYPE OF EQUIPMENT	MAXIMUM RATED CAPACITY [a]	MAKE	MODEL	SERIAL NUMBER	DATE OF MFR	EQUIPMENT ID NUMBER
Wood Grinding Area 124						
Feed Bin	N/A	N/A	N/A	N/A	N/A	631
Screw Conveyor	N/A	N/A	N/A	N/A	N/A	640
Wet Hammermill w/Electric Motor	6.8 ODT/hr 300 hp	West Salem	4254S	127790	1996	651
Sawdust Drying Area 123						
Fuel Bin	2 ODT/hr	Custom Fabricated	None	N/A	2005	720
Fuel Hammermill	1.5 ODT/hr	Forest Energy	None	N/A	1992	730
Dryer Infeed Bin	N/A	N/A	N/A	N/A	N/A	310
Screw Conveyor	N/A	N/A	N/A	N/A	N/A	325
Belt Conveyor	N/A	N/A	N/A	N/A	N/A	320

Table B.1 Equipment List

TYPE OF EQUIPMENT	MAXIMUM RATED CAPACITY [a]	MAKE	MODEL	SERIAL NUMBER	DATE OF MFR	EQUIPMENT ID NUMBER
Sawdust Dryer	8 ODT/hr	TSI	13' x 45'	N/A	2011	340
Sawdust Dryer Burner	30 MMBtu/hr	SolaGen	OW-30-LI	FEC04-10	2004	345
Sawdust Dryer Cyclone	65,000 cfm	Capital Engineering	12'	N/A	2013	370
Pellet Production Area 456						
KD Feed Bin	N/A	N/A	N/A	N/A	N/A	210
KD Collection Conveyor	N/A	N/A	N/A	N/A	N/A	220
KD Bucket Elevator	N/A	N/A	N/A	N/A	N/A	230
KD Collection Screw #1	N/A	N/A	N/A	N/A	N/A	240
KD Collection Screw #2	N/A	N/A	N/A	N/A	N/A	249

Table B.1 Equipment List

TYPE OF EQUIPMENT	MAXIMUM RATED CAPACITY [a]	MAKE	MODEL	SERIAL NUMBER	DATE OF MFR	EQUIPMENT ID NUMBER
KD Collection Screw #3	N/A	N/A	N/A	N/A	N/A	250
Dry Hammermill w/Electric Motor	8 ODT/hr 200 hp	West Salem	4430S	644906	2007	261
Dry Hammermill Cyclone	6,000 cfm	MAC	HE33	N/A	2007	265
Screw Conveyor	N/A	N/A	N/A	N/A	N/A	262
Screw Conveyor	N/A	N/A	N/A	N/A	N/A	263
Screw Conveyor	N/A	N/A	N/A	N/A	N/A	270
Bucket Elevator	N/A	N/A	N/A	N/A	N/A	264
Pellet Mill #1 w/Electric Motor	3 ODT/hr 250 hp	Sprout Waldren	21V	75-X78	1975	450
Pellet Mill #2 w/Electric Motor	3 ODT/hr 300 hp	Sprout Waldren	21V	74-2295	1974	490

Table B.1 Equipment List

TYPE OF EQUIPMENT	MAXIMUM RATED CAPACITY [a]	MAKE	MODEL	SERIAL NUMBER	DATE OF MFR	EQUIPMENT ID NUMBER
Pellet Mill #3 w/Electric Motor	3 ODT/hr 250 hp	Sprout Waldren	21V	76-2065	1976	496
Belt Conveyor	N/A	N/A	N/A	N/A	N/A	510
Belt Conveyor	N/A	N/A	N/A	N/A	N/A	520
Bucket Elevator	N/A	N/A	N/A	N/A	N/A	530
Aspirator	9 ODT/hr	Custom Fabricated	None	N/A	2006	540
Pellet Cooler	8 ODT/hr	SolaGen	Vertical	N/A	1992	550
Pellet Cooler Cyclone	15,000 cfm	AirLanco	HE52	N/A	2006	552
Pellet Moisture Vent	2,000 cfm	Forest Energy	None	N/A	1996	505
Pellet Weight Screw	N/A	N/A	N/A	N/A	N/A	542

Table B.1 Equipment List

TYPE OF EQUIPMENT	MAXIMUM RATED CAPACITY [a]	MAKE	MODEL	SERIAL NUMBER	DATE OF MFR	EQUIPMENT ID NUMBER
Belt Conveyor	N/A	N/A	N/A	N/A	N/A	543
Bucket Elevator	N/A	N/A	N/A	N/A	N/A	544
Pellet Cooler Silo	200 tons	Scaffco	22' Diameter	N/A	1994	810
Pellet Crumbler	10 ODT/hr	Wenger	8" x 36"	N/A	1952	815
Pellet Screening & Packaging Area 10						
Screen	20 ODT/hr	Rotex	41	N/A	1952	817
Belt Conveyor	N/A	N/A	N/A	N/A	N/A	830
Bagging Fines Cyclone	3,000 cfm	Unknown	Unknown	N/A	Unknown	740

[a] The maximum rated capacity of equipment is provided in oven dried tons per hour (ODT/hr), horsepower (hp), million Btu per hour (MMBtu/hr), or cubic feet per minute (cfm).

APPENDIX C EMISSION SOURCE FORM

Table C.1 Emission Source Form

					USE THIS SECTION FOR MODIFICATIONS ONLY		
EMISSION POINT		REGULATED AIR POLLUTANT NAME	PTE [a]		PTE AFTER MODIFICATION		CHANGE IN PTE
NUMBER	NAME		(lb/hr)	(tpy)	(lb/hr)	(tpy)	(tpy)
Wood Grinding Area 124							
Wet	Unloading to Wet Raw Material Storage Pile	PM	0.018	0.00	--	--	--
		PM_{10}	0.008	0.00	--	--	--
		$PM_{2.5}$	0.0012	0.000	--	--	--
Dry	Unloading to Dry Raw Material Storage Pile	PM	0.04	0.00	--	--	--
		PM_{10}	0.017	0.00	--	--	--
		$PM_{2.5}$	0.0024	0.000	--	--	--
Wind	Wind Erosion of Wet Raw Material Storage Pile	PM	0.0008	0.003	--	--	--
		PM_{10}	0.0004	0.002	--	--	--
		$PM_{2.5}$	0.0002	0.0009	--	--	--
Wind	Wind Erosion of Dry Raw Material Storage Pile	PM	0.0008	0.003	--	--	--
		PM_{10}	0.0004	0.002	--	--	--
		$PM_{2.5}$	0.0002	0.0009	--	--	--
Wet	Material Transfer to Feed Bin	PM	0.006	0.03	--	--	--
		PM_{10}	0.003	0.01	--	--	--
		$PM_{2.5}$	0.0004	0.002	--	--	--

Table C.1 Emission Source Form

					USE THIS SECTION FOR MODIFICATIONS ONLY		
EMISSION POINT		REGULATED AIR POLLUTANT NAME	PTE [a]		PTE AFTER MODIFICATION		CHANGE IN PTE
NUMBER	NAME		(lb/hr)	(tpy)	(lb/hr)	(tpy)	(tpy)
Sawdust Drying Area 122							
Dry	Material Transfer to Fuel Bin	PM	0.003	0.01	--	--	--
		PM_{10}	0.001	0.006	--	--	--
		$PM_{2.5}$	0.0002	0.0009	--	--	--
Wet	Material Transfer to Dryer Infeed Bin	PM	0.006	0.03	--	--	--
		PM_{10}	0.003	0.01	--	--	--
		$PM_{2.5}$	0.0004	0.002	--	--	--
Wet	Material Transfer to Sawdust Dryer	PM	0.006	0.03	--	--	--
		PM_{10}	0.003	0.01	--	--	--
		$PM_{2.5}$	0.0004	0.002	--	--	--
340 / 345 / 370	Sawdust Dryer and Sawdust Dryer Burner w/Cyclone	PM	11.10	48.62	--	--	--
		PM_{10}	11.10	48.62	--	--	--
		$PM_{2.5}$	11.10	48.62	--	--	--
		CO	5.44	23.83	--	--	--
		NO_X	4.64	20.32	--	--	--
		SO_2	0	0	--	--	--

Table C.1 Emission Source Form

					USE THIS SECTION FOR MODIFICATIONS ONLY		
EMISSION POINT		REGULATED AIR POLLUTANT NAME	PTE [a]		PTE AFTER MODIFICATION		CHANGE IN PTE
NUMBER	NAME		(lb/hr)	(tpy)	(lb/hr)	(tpy)	(tpy)
		VOC	7.20	31.54	--	--	--
		CO_2	6,205	27,177	--	--	--
		CH_4	0.48	2.09	--	--	--
		N_2O	0.24	1.04	--	--	--
		HAPs	0.56	2.45	--	--	--
Pellet Production Area 456							
Dry	Material Transfer to KD Feed Bin	PM	0.01	0.05	--	--	--
		PM_{10}	0.006	0.02	--	--	--
		$PM_{2.5}$	0.001	0.004	--	--	--
Dry	Material Transfer to Dry Hammermill	PM	0.01	0.05	--	--	--
		PM_{10}	0.006	0.02	--	--	--
		$PM_{2.5}$	0.001	0.004	--	--	--
261 / 265	Dry Hammermill w/Cyclone	PM	0.54	2.35	--	--	--
		PM_{10}	0.27	1.17	--	--	--
		$PM_{2.5}$	0.27	1.17	--	--	--

Table C.1 Emission Source Form

					USE THIS SECTION FOR MODIFICATIONS ONLY		
EMISSION POINT		REGULATED AIR POLLUTANT NAME	PTE [a]		PTE AFTER MODIFICATION		CHANGE IN PTE
NUMBER	NAME		(lb/hr)	(tpy)	(lb/hr)	(tpy)	(tpy)
Dry	Conveyor to Conveyor Transfer	PM	0.01	0.05	--	--	--
		PM_{10}	0.006	0.02	--	--	--
		$PM_{2.5}$	0.001	0.004	--	--	--
Dry	Material Transfer to Pellet Cooler	PM	0.01	0.05	--	--	--
		PM_{10}	0.006	0.02	--	--	--
		$PM_{2.5}$	0.001	0.004	--	--	--
550 / 552	Pellet Cooler w/Cyclone	PM	3.35	14.68	--	--	--
		PM_{10}	1.91	8.37	--	--	--
		$PM_{2.5}$	1.91	8.37	--	--	--
Dry	Material Transfer to Storage Silo	PM	0.01	0.05	--	--	--
		PM_{10}	0.01	0.02	--	--	--
		$PM_{2.5}$	0.00	0.00	--	--	--
Pellet Screening & Packaging Area 10							
Dry	Material Transfer to Bagging Equipment	PM	0.01	0.05	--	--	--
		PM_{10}	0.006	0.02	--	--	--
		$PM_{2.5}$	0.0008	0.004	--	--	--

Table C.1 Emission Source Form

					USE THIS SECTION FOR MODIFICATIONS ONLY		
EMISSION POINT		REGULATED AIR POLLUTANT NAME	PTE [a]		PTE AFTER MODIFICATION		CHANGE IN PTE
NUMBER	NAME		(lb/hr)	(tpy)	(lb/hr)	(tpy)	(tpy)
817 / 740	Screening and Bagging Equipment w/Cyclone	PM	0.005	0.02	--	--	--
		PM_{10}	0.003	0.01	--	--	--
		$PM_{2.5}$	0.005	0.02	--	--	--

APPENDIX D PROCESS FLOW DIAGRAM

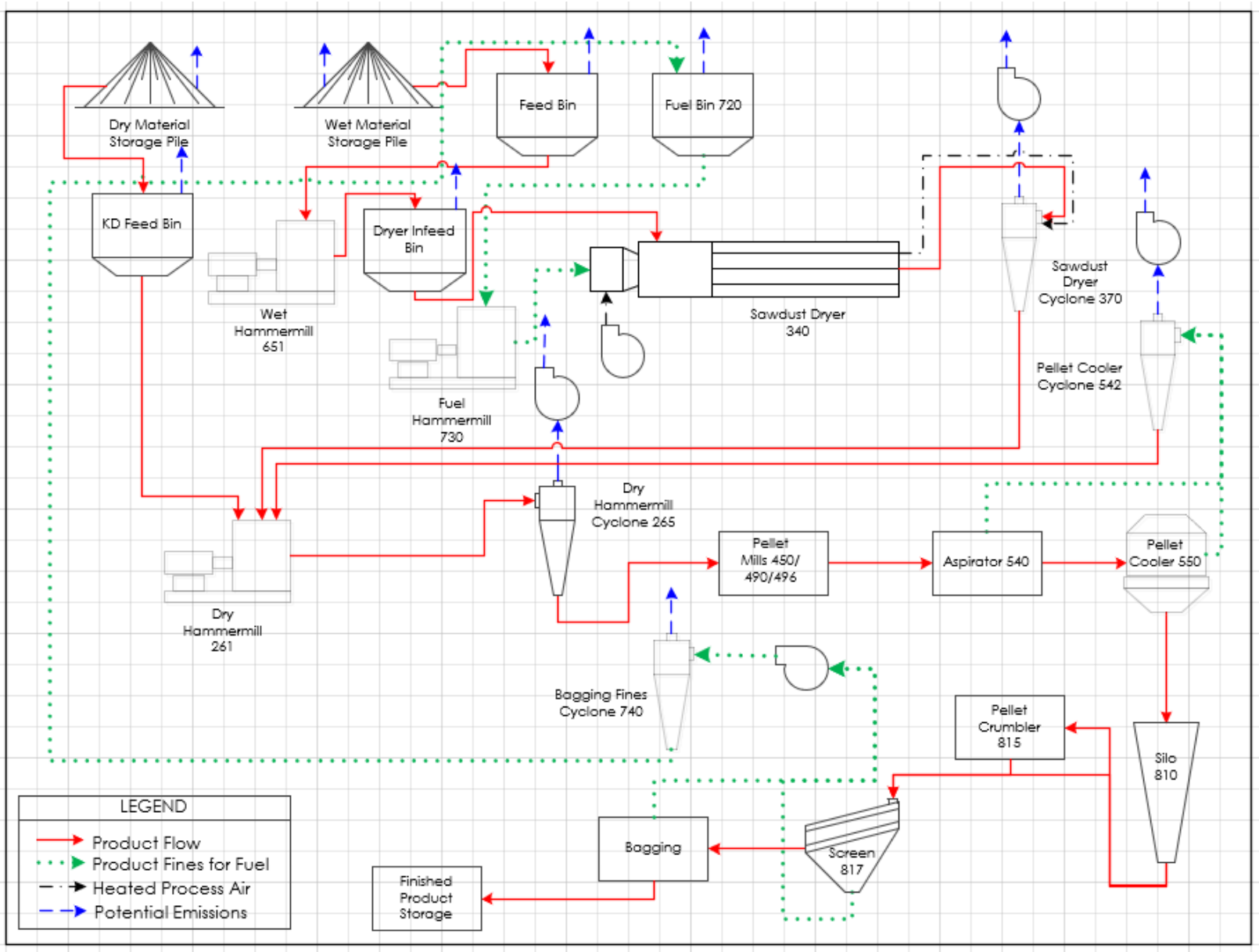

Figure D.1 Overview of the Forest Energy Corporation Facility-Wide Operations

APPENDIX E EMISSION CALCULATION METHODOLOGY

E.1 INTRODUCTION

The methodology used to calculate the emission rates presented in Section 6, Appendix C, and Appendix F of this application is explained in the following sections, including identification of process rates, emission factors, and control efficiencies. Emissions are calculated using the following general equations:

$$E_A = PR_A \times EF \times \left(1 - \frac{CE}{100}\right) \times \left(\frac{1\ ton}{2{,}000\ lb}\right)$$

$$E_H = PR_H \times EF \times \left(1 - \frac{CE}{100}\right)$$

where:

E_A	=	calculated emissions on an annual basis (tons of pollutant/yr);
E_H	=	calculated emissions on an hourly basis (lbs of pollutant/hr);
PR_A	=	annual process rate associated with the emission unit (activity/yr);
PR_H	=	hourly process rate associated with the emission unit (activity/hr);
EF	=	emission factor (lbs of pollutant/activity); and
CE	=	efficiency associated with a control method (%).

E.2 WIND EROSION OF RAW MATERIAL STORAGE PILES

E.2.1 Process Rates

The annual and hourly process rates for the raw material storage piles are based on the acreage of the storage area.

E.2.2 Emission Factors

Uncontrolled PM, PM_{10}, and $PM_{2.5}$ emissions resulting from the raw material storage piles are calculated using USEPA Region 10 Memorandum, Particulate Matter Potential to Emit Emission Factors for Activities at Sawmills, Excluding Boilers, Located in Pacific Northwest Indian Country for wind erosion of pile (05/14). The annual and hourly process rate and emission factors for the raw material storage piles are presented in Table E.1.

E.2.3 Control Efficiencies

Besides best operating practices, no additional control methods are implemented on the raw material storage piles.

E.3 MATERIAL TRANSFER OF WET & DRY MATERIAL

E.3.1 Process Rates

The annual and hourly process rates for material transfer of wet and dry material are based on the amount of material transferred and can be determined using equipment capacities and hours of operations, or maximum expected throughputs.

E.3.2 Emission Factors

Uncontrolled PM, PM_{10}, and $PM_{2.5}$ emissions resulting from material transfer of wet and dry material are calculated using USEPA Region 10 Memorandum, Particulate Matter Potential to Emit Emission Factors for Activities at Sawmills, Excluding Boilers, Located in Pacific Northwest Indian Country for drop of wet and dry material from one surface to another (03/14). The annual and hourly process rates and emission factors for the material transfer of dry material are presented in Tables E.2 and E.3.

E.3.3 Control Efficiencies

Besides best operating practices, no additional control methods are implemented on material transfer of wet and dry material.

E.4 SAWDUST DRYER BURNER – WOOD COMBUSTION

E.4.1 Process Rates

The annual and hourly process rates for the sawdust dryer when combusting wood are based on the heat input rating of the dryer (30 MMBtu/hr), the production rate (8 ODT/hr), and continuous operation (24 hrs/day and 365 days/yr).

E.4.2 Emission Factors

Controlled PM_{10} emissions resulting from sawdust dryer operation are calculated using the PM_{10} emission limitation included in the current permit. The emission limitation represents emissions from both the drying process and wood combustion. PM and $PM_{2.5}$ are assumed to be equal to PM_{10}.

Uncontrolled CO and NOx emissions resulting from wood combustion during sawdust dryer operation are calculated using AP-42, Section 10.6.2, Table 10.6.2-2 for uncontrolled direct wood-fired rotary dryers using softwood fuel (02/02). Uncontrolled VOC emissions resulting from wood combustion during sawdust dryer operation are calculated using emission factors from AP-42, Section 10.6.2, Table 10.6.2-3 for uncontrolled direct wood-fired rotary dryers using softwood fuel (02/02). Wood combustion is not assumed to have any SO_2 emissions.

Uncontrolled HAP emissions resulting from wood combustion during sawdust dryer operation are calculated using emission factors from AP-42, Section 10.6.2, Table 10.6.2-3 for uncontrolled direct wood-fired rotary dryers using softwood fuel (02/02). The formaldehyde emission factor used was obtained from AP-42, Section 1.6, Table 1.6-3 rather than AP-42, Section 10.6.2, Table 10.6.2-3 as a significant portion of the formaldehyde in Table 10.6.2-3 is assumed to be from particle board additives rather than wood.

Uncontrolled CO_2, CH_4, and N_2O emissions resulting from wood combustion during sawdust dryer operation are calculated using the emission factors from 40 CFR 98, Tables C-1 and C-2 for wood and wood residuals solid biomass fuel.

The annual and hourly process rates and emission factors for the sawdust dryer burner are presented in Table E.4.

E.4.3 Control Efficiencies

Besides best operating practices, no additional control methods are implemented on the Sawdust Dryer Burner when combusting wood.

E.5 DRY HAMMERMILL

E.5.1 Process Rates

The annual and hourly process rates for the dry hammermill are based on the production rate (8 ODT/hr) and continuous operation (24 hrs/day and 365 days/yr).

E.5.2 Emission Factors

Controlled PM emissions resulting from dry hammermill operation are calculated using AP-42, Section 9.9.1, Table 9.9.1-2 for cyclone-controlled hammermills at animal feed mills (03/03). PM_{10} emissions are estimated to be equal to 50% of the filterable PM emissions according to footnote g of Table 9.9.1-2. $PM_{2.5}$ emissions are assumed to be equal to PM_{10} emissions.

E.5.3 Control Efficiencies

Emissions of PM, PM_{10}, and $PM_{2.5}$ resulting from dry hammermill operation are controlled by the dry hammermill cyclone. Since the emission factor used in calculations includes the application of a control device, no additional reduction is applied.

The annual and hourly process rates, emission factors, and control efficiencies for the dry hammermill are presented in Table E.5.

E.6 PELLET COOLER

E.6.1 Process Rates

The annual and hourly process rates for the pellet cooler are based on the production rate (8 ODT/hr) and continuous operation (24 hrs/day and 365 days/yr).

E.6.2 Emission Factors

Controlled PM emissions resulting from pellet cooler operation are calculated using AP-42, Section 9.9.1, Table 9.9.1-2 for cyclone-controlled pellet coolers at animal feed mills (03/03) for both filterable and condensable PM. Filterable PM_{10} emissions are estimated to be equal to 50% of the filterable PM emissions according to footnote g of Table 9.9.1-2. Filterable $PM_{2.5}$ emissions are assumed to be equal

to filterable PM_{10} emissions. Condensable PM_{10} and $PM_{2.5}$ emissions are assumed to be equal to condensable PM emissions.

E.6.3 Control Efficiencies

Emissions of PM, PM_{10}, and $PM_{2.5}$ resulting from pellet cooler operation are controlled by the pellet cooler cyclone. Since the emission factor used in calculations includes the application of a control device, no additional reduction is applied.

The annual and hourly process rates, emission factors, and control efficiencies for the pellet cooler are presented in Table E.5.

E.7 SCREENING & BAGGING EQUIPMENT

E.7.1 Process Rates

The annual, daily, and hourly process rates for screening and bagging operations are based on the production rate (8 ODT/hr) and continuous operation (24 hrs/day and 365 days/yr).

E.7.2 Emission Factors

Uncontrolled PM and PM_{10} emissions resulting from screening and bagging operations are calculated using AP-42, Section 9.9.1, Table 9.9.1-2 for uncontrolled feed shipping at animal feed mills (03/03). $PM_{2.5}$ emissions are assumed to be equal to PM_{10} emissions.

E.7.3 Control Efficiencies

Emissions of PM, PM_{10}, and $PM_{2.5}$ resulting from screening and bagging operations are controlled by the bagging fines cyclone. Since manufacturer's literature for this cyclone does not exist, the control efficiency is based on EPA's Air Pollution Control Technology Fact Sheet (EPA-452/F-03-005). The average collection efficiency provided for a conventional single cyclone is 80% for PM, 60% for PM_{10}, and 20% for $PM_{2.5}$.

The annual and hourly process rates, emission factors, and control efficiencies for the screening and bagging equipment are presented in Table E.5.

Table E.1 Process Rate and Emission Factor Information for Wind Erosion of Raw Material Storage Piles

PROCESS NUMBER	PROCESS/EMISSION UNIT DESCRIPTION	PROCESS RATE AND EMISSION FACTOR INFORMATION			
Wind	Wind Erosion of Raw Material Storage Piles	Process Rates	Annual	0.009	acres
			Hourly	0.009	acres
		Emission Factors from EPA Region 10 Memo (wind erosion of pile)	PM	0.38	tons/acre-yr
			PM_{10}	0.19	tons/acre-yr
			$PM_{2.5}$	0.095	tons/acre-yr

Table E.2 Process Rate Information for the Material Transfers

PROCESS NUMBER	PROCESS/EMISSION UNIT DESCRIPTION	PROCESS RATE INFORMATION	
		HOURLY (TONS)	ANNUAL (TONS)
WET MATERIAL TRANSFERS			
Wet	Unloading to Wet Raw Material Storage Pile	24.0	2,800
Wet	Material Transfer to Feed Bin	8.0	70,080
Wet	Material Transfer to Dryer Infeed Bin	8.0	70,080
Wet	Material Transfer to Sawdust Dryer	8.0	70,080
DRY MATERIAL TRANSFERS			
Dry	Unloading to Dry Raw Material Storage Pile	24.0	2,800
Dry	Material Transfer to Fuel Bin	2.0	17,520
Dry	Material Transfer to KD Feed Bin	8.0	70,080
Dry	Material Transfer to Dry Hammermill	8.0	70,080
Dry	Conveyor to Conveyor Transfer	8.0	70,080
Dry	Material Transfer to Pellet Cooler	8.0	70,080

Table E.2 Process Rate Information for the Material Transfers

PROCESS NUMBER	PROCESS/EMISSION UNIT DESCRIPTION	PROCESS RATE INFORMATION	
		HOURLY (TONS)	ANNUAL (TONS)
Dry	Material Transfer to Storage Silo	8.0	70,080
Dry	Material Transfer to Bagging Equipment	8.0	70,080

Table E.3 Emission Factor Information for the Material Transfers

PROCESS NUMBER	PROCESS/EMISSION UNIT DESCRIPTION	PROCESS RATE AND EMISSION FACTOR INFORMATION			
		REFERENCE	POLLUTANT	EMISSION FACTOR	UNITS
		PROCESS RATES		HOURLY (TONS)	ANNUAL (TONS)
WET MATERIAL TRANSFERS					
		Emission Factors from EPA Region 10 Memo (drop of wet material from one surface to another)	PM	0.0008	lbs/ton
			PM_{10}	0.0004	lbs/ton
			$PM_{2.5}$	0.0001	lbs/ton
DRY MATERIAL TRANSFERS					
		Emission Factors from EPA Region 10 Memo (drop of dry material from one surface to another)	PM	0.0015	lbs/ODT
			PM_{10}	0.0007	lbs/ODT
			$PM_{2.5}$	0.0001	lbs/ODT

Table E.4 Process Rate and Emission Factor Information for the Sawdust Dryer Burner

PROCESS NUMBER	PROCESS/EMISSION UNIT DESCRIPTION	PROCESS RATES			EMISSION FACTORS		
		HOURLY (HRS/HR)	ANNUAL (HRS/YR)	DESCRIPTION	REGULATED AIR POLLUTANT	VALUE	UNITS
345 / 370	Sawdust Dryer Burner w/Cyclone - Wood Combustion	1	8,760	Assume continuous operation (60 mins/hr and 8,760 hrs/yr)	PM	11.1	lbs/hr
					PM_{10}	11.1	lbs/hr
					$PM_{2.5}$	11.1	lbs/hr
					CO	0.68	kg/MMBtu
					NO_X	0.58	kg/MMBtu
					SO_2	0	kg/MMBtu
					VOC	0.90	kg/MMBtu
					CO_2	93.80	kg/MMBtu
					CH_4	0.032	kg/MMBtu
					N_2O	0.0042	kg/MMBtu
					Total HAPs	5.77E-02	lbs/ODT

Table E.5 Process Rate and Emission Factor Information for Processes Controlled by Cyclones

PROCESS NUMBER	PROCESS/EMISSION UNIT DESCRIPTION	PROCESS RATES				CONTROL (%)	EMISSION FACTORS (LBS/TON)		
		HOURLY (HRS/HR)	ANNUAL (HRS/YR)	HOURLY (TONS/HR)	ANNUAL (TONS\YR)		PM	PM_{10}	$PM_{2.5}$
261 / 265	Dry Hammermill w/Cyclone	1	8,760	8.0	8.0	Included in Emission Factor	0.067	0.034	0.034
550 / 552	Pellet Cooler w/Cyclone	1	8,760	8.0	8.0	Included in Emission Factor	0.419	0.239	0.239
817 / 740	Screening & Bagging Equipment	1	8,760	20.0	8.0	PM = 80% PM10 = 60% PM2.5 = 20%	0.0033	0.0008	0.0008

APPENDIX F EMISSION INVENTORY TABLES FOR POTENTIAL EMISSION CALCULATIONS

Table F.1 Particulate Matter Emission Factors

ID	PROCESS DESCRIPTION	EMISSION FACTORS				PROCESS RATE UNITS	REFERENCE
		PM	PM_{10}	$PM_{2.5}$	UNITS		
Wet	Wet Material Transfers	0.00075	0.00035	0.00005	lbs/ton	tons	EPA Region 10 Memo [a] (drop of wet material from one surface to another)
Dry	Dry Material Transfers	0.0015	0.0007	0.0001	lbs/ODT	ODT	EPA Region 10 Memo [a] (drop of dry material from one surface to another)
Wind	Wind Erosion of Raw Material Storage Pile	0.38	0.19	0.095	tons/acre-yr	acres	EPA Region 10 Memo [a] (wind erosion of pile)
340 / 345 / 370	Sawdust Dryer and Sawdust Dryer Burner w/Cyclone	11.1	11.1	11.1	lbs/hr	hours	Permit Limit
261 / 265	Dry Hammermill w/Cyclone	0.067	0.034	0.034	lbs/ton	tons	AP-42, Section 9.9.1, Table 9.9.1-2 Animal Feed Mills, Cyclone-Controlled Hammermill (03/03)
550 / 552	Pellet Cooler w/Cyclone	0.419	0.239	0.239	lbs/ton	tons	AP-42, Section 9.9.1, Table 9.9.1-2 Animal Feed Mills, Cyclone-Controlled Pellet Cooler (03/03)
817 / 740	Screening & Bagging Equipment	0.0033	0.0008	0.0008	lbs/ton	tons	AP-42, Section 9.9.1, Table 9.9.1-2 Animal Feed Mills, Uncontrolled Feed Shipping (03/03)

[a] "Particulate Matter Potential to Emit Emission Factors for Activities at Sawmills, Excluding Boilers, Located in Pacific Northwest Indian Country," by Dan Meyer, May 8, 2014, *USEPA Region 10 Memorandum*.

Table F.2 Gaseous Emission Factors

ID	PROCESS DESCRIPTION	EMISSION FACTORS								PROCES RATE UNITS	REFERENCE
		CO	NO_X	SO_2	VOC	CO_2	CH_4	N_2O	UNITS		
340 / 345 / 370	Sawdust Dryer Burner w/Cyclone - Wood Combustion [a]	0.68	0.58	0	0.90	--	--	--	lbs/ODT	hours	AP-42, Section 10.6.2, Table 10.6.2-2, Uncontrolled Rotary Dryer, Direct Wood-Fired Softwood (02/02), AP-42, Section 10.6.2, Table 10.6.2-3, Uncontrolled Rotary Dryer, Direct Wood-Fired Softwood (02/02)
		--	--	--	--	93.8	0.0072	0.0036	kg/MMBtu	hours	40 CFR 98, Tables C-1 and C-2 for Wood and Wood Residuals

[a] Wood fuel combustion comprises the majority of Sawdust Dryer Burner operation and results in the greatest emissions. Diesel fuel ignited by a propane pilot flame is combusted together with the wood only during cold startups. The propane burns for only a few minutes to ignite the diesel fuel. Once operating temperatures are achieved (approximately 30 minutes), the diesel is turned off as it is no longer required to sustain wood fuel combustion.

Table F.3 Hazardous Air Pollutant Emission Factors

ID	PROCESS DESCRIPTION	EMISSION FACTORS			PROCESS RATE UNITS	REFERENCE
		NAME	EF	UNITS		
340 / 345 / 370	Sawdust Dryer Burner w/Cyclone - Wood Combustion [a]	1,1,1-Trichloroethane	0.000012	lbs/ODT	hours	AP-42, Section 10.6.2, Table 10.6.2-3, Uncontrolled Rotary Dryer, Direct Wood-Fired Softwood (02/02), AP-42, Section 1.6, Table 1.6-3, Wood Residue Combustion
		Acetaldehyde	0.013	lbs/ODT		
		Acrolein	0.0045	lbs/ODT		
		Benzene	0.00099	lbs/ODT		
		Biphenyl	0.000039	lbs/ODT		
		Bromomethane	0.000028	lbs/ODT		
		Carbon Disulfide	0.000018	lbs/ODT		
		Carbon Tetrachloride	0.000012	lbs/ODT		
		Chloromethane	0.00011	lbs/ODT		
		Cumene	0.000069	lbs/ODT		
		Ethyl Benzene	0.0000038	lbs/ODT		
		Formaldehyde	0.0165	lbs/ODT		
		m-, p-Xylene	0.00055	lbs/ODT		
		Methanol	0.014	lbs/ODT		
		Methyl Ethyl Ketone	0.0049	lbs/ODT		
		Methyl Isobutyl Ketone	0.0024	lbs/ODT		
		Methylene Chloride	0.00063	lbs/ODT		
		n-Hexane	0.000026	lbs/ODT		
		o-Xylene	0.000014	lbs/ODT		
		Phenol	0.0066	lbs/ODT		
		Propionaldehyde	0.0032	lbs/ODT		
		Styrene	0.00012	lbs/ODT		

Table F.3 Hazardous Air Pollutant Emission Factors

ID	PROCESS DESCRIPTION	EMISSION FACTORS			PROCESS RATE UNITS	REFERENCE
		NAME	EF	UNITS		
340 / 345 / 370	Sawdust Dryer Burner w/Cyclone - Wood Combustion [a] (cont'd.)	Toluene	0.0021	lbs/ODT	hours	
		Total HAPs	6.98E-02	lbs/ODT		

[a] Wood fuel combustion comprises the majority of Sawdust Dryer Burner operation and results in the greatest emissions. Diesel fuel ignited by a propane pilot flame is combusted together with the wood only during cold startups. The propane burns for only a few minutes to ignite the diesel fuel. Once operating temperatures are achieved (approximately 30 minutes), the diesel is turned off as it is no longer required to sustain wood fuel combustion.

Table F.4 Maximum Annual Particulate Emissions

EMISSION SOURCE		NON-FUG. (NF) / FUG. (F)	ANNUAL MAXIMUM CAPACITY / PROCESS RATE	UNITS	EMISSION FACTORS				CONTROL EFF. (%)	PM EMISSIONS (TPY)		PM_{10} EMISSIONS (TPY)		$PM_{2.5}$ EMISSIONS (TPY)	
ID	PROCESS DESCRIPTION				PM	PM_{10}	$PM_{2.5}$	UNITS		UNCONTROLLED	CONTROLLED	UNCONTROLLED	CONTROLLED	UNCONTROLLED	CONTROLLED
Wood Grinding Area 124															
Wet	Unloading to Wet Raw Material Storage Pile	F	2,800	tons	0.00075	0.00035	0.00005	lbs/ton	--	0.001	0.001	0.0005	0.0005	0.00007	0.00007
Dry	Unloading to Dry Raw Material Storage Pile	F	2,800	ODT	0.0015	0.0007	0.0001	lbs/ODT	--	0.002	0.002	0.001	0.001	0.0001	0.0001
Wind	Wind Erosion of Wet Raw Material Storage Pile	F	0.009	acres	0.38	0.19	0.095	tons/acre-yr	--	0.003	0.003	0.002	0.002	0.0009	0.0009
Wind	Wind Erosion of Dry Raw Material Storage Pile	F	0.009	acres	0.38	0.19	0.095	tons/acre-yr	--	0.003	0.003	0.002	0.002	0.0009	0.0009
Wet	Material Transfer to Feed Bin	NF	8.0	tons	0.00075	0.00035	0.00005	lbs/ton	--	0.03	0.03	0.01	0.01	0.002	0.002
			8,760	hours	--	--	--	--	--	--	--	--	--	--	--
Sawdust Drying Area 122															
Dry	Material Transfer to Fuel Bin	NF	2.0	ODT	0.0015	0.0007	0.0001	lbs/ODT	--	0.01	0.01	0.006	0.006	0.0009	0.0009
			8,760	hours	--	--	--	--	--	--	--	--	--	--	--
Wet	Material Transfer to Dryer Infeed Bin	NF	8.0	tons	0.00075	0.00035	0.00005	lbs/ton	--	0.03	0.03	0.01	0.01	0.002	0.002
			8,760	hours	--	--	--	--	--	--	--	--	--	--	--
Wet	Material Transfer to Sawdust Dryer	NF	8.0	tons	0.00075	0.00035	0.00005	lbs/ton	--	0.03	0.03	0.01	0.01	0.002	0.002
			8,760	hours	--	--	--	--	--	--	--	--	--	--	--
340 / 345 / 370	Sawdust Dryer and Sawdust Dryer Burner w/Cyclone	NF	8,760	hours	11.1	11.1	11.1	lbs/hr	--	--	48.62	--	48.62	--	48.62
Pellet Production Area 456															
Dry	Material Transfer to KD Feed Bin	NF	8.0	ODT	0.0015	0.0007	0.0001	lbs/ODT	--	0.05	0.05	0.02	0.02	0.004	0.004
			8,760	hours	--	--	--	--	--	--	--	--	--	--	--
Dry	Material Transfer to Dry Hammermill	NF	8.0	ODT	0.0015	0.0007	0.0001	lbs/ODT	--	0.05	0.05	0.02	0.02	0.004	0.004
			8,760	hours	--	--	--	--	--	--	--	--	--	--	--
261 / 265	Dry Hammermill w/Cyclone	NF	8.0	tons	0.067	0.034	0.034	lbs/ton	--	--	2.35	--	1.17	--	1.17
			8,760	hours	--	--	--	--	--	--	--	--	--	--	--
Dry	Conveyor to Conveyor Transfer	NF	8.0	ODT	0.0015	0.0007	0.0001	lbs/ODT	--	0.05	0.05	0.02	0.02	0.004	0.004

Table F.4 Maximum Annual Particulate Emissions

EMISSION SOURCE		NON-FUG. (NF) / FUG. (F)	ANNUAL MAXIMUM CAPACITY / PROCESS RATE	UNITS	EMISSION FACTORS				CONTROL EFF. (%)	PM EMISSIONS (TPY)		PM_{10} EMISSIONS (TPY)		$PM_{2.5}$ EMISSIONS (TPY)	
ID	PROCESS DESCRIPTION				PM	PM_{10}	$PM_{2.5}$	UNITS		UNCONTROLLED	CONTROLLED	UNCONTROLLED	CONTROLLED	UNCONTROLLED	CONTROLLED
			8,760	hours	--	--	--	--	--	--	--	--	--	--	--
Dry	Material Transfer to Pellet Cooler	NF	8.0	ODT	0.0015	0.0007	0.0001	lbs/ODT	--	0.05	0.05	0.02	0.02	0.004	0.004
			8,760	hours	--	--	--	--	--	--	--	--	--	--	--
550 / 552	Pellet Cooler w/Cyclone	NF	8.0	tons	0.419	0.239	0.239	lbs/ton	--	--	14.68	--	8.37	--	8.37
			8,760	hours	--	--	--	--	--	--	--	--	--	--	--
Dry	Material Transfer to Storage Silo	NF	8.0	ODT	0.0015	0.0007	0.0001	lbs/ODT	--	0.05	0.05	0.02	0.02	0.004	0.004
			8,760	hours	--	--	--	--	--	--	--	--	--	--	--
Pellet Screening & Packaging Area 10															
Dry	Material Transfer to Bagging Equipment	NF	8.0	ODT	0.0015	0.0007	0.0001	lbs/ODT	--	0.05	0.05	0.02	0.02	0.004	0.004
			8,760	hours	--	--	--	--	--	--	--	--	--	--	--
817 / 740	Screening and Bagging Equipment w/Cyclone	NF	8.0	tons	0.0033	0.0008	0.0008	lbs/ton	80%	0.12	0.02	--	--	--	--
		NF	8,760	hours	--	--	--	--	60%	--	--	0.03	0.01	--	--
		NF			--	--	--	--	20%	--	--	--	--	0.03	0.02
TOTAL NON-FUGITIVE EMISSIONS:										**--**	**66.08**	**--**	**58.37**	**--**	**58.22**
TOTAL FUGITIVE EMISSIONS:										**--**	**0.01**	**--**	**0.00**	**--**	**0.00**
TOTAL EMISSIONS:										**--**	**66.09**	**--**	**58.37**	**--**	**58.22**

Table F.5 Maximum Hourly Particulate Emissions

EMISSION SOURCE		NON-FUG. (NF) / FUG. (F)	HOURLY MAXIMUM CAPACITY / PROCESS RATE	UNITS	EMISSION FACTORS				CONTROL EFF. (%)	PM EMISSIONS (LBS/HR)		PM_{10} EMISSIONS (LBS/HR)		$PM_{2.5}$ EMISSIONS (LBS/HR)	
ID	PROCESS DESCRIPTION				PM	PM_{10}	$PM_{2.5}$	UNITS		UNCONTROLLED	CONTROLLED	UNCONTROLLED	CONTROLLED	UNCONTROLLED	CONTROLLED
Wood Grinding Area 124															
Wet	Unloading to Wet Raw Material Storage Pile	F	24.0	tons	0.00075	0.00035	0.00005	lbs/ton	--	0.02	0.02	0.008	0.008	0.001	0.001
Dry	Unloading to Dry Raw Material Storage Pile	F	24.0	ODT	0.0015	0.0007	0.0001	lbs/ODT	--	0.04	0.04	0.02	0.02	0.002	0.002
Wind	Wind Erosion of Wet Raw Material Storage Pile	F	0.009	acres	0.38	0.19	0.095	tons/acre-yr	--	0.0008	0.0008	0.0004	0.0004	0.0002	0.0002
Wind	Wind Erosion of Dry Raw Material Storage Pile	F	0.009	acres	0.38	0.19	0.095	tons/acre-yr	--	0.0008	0.0008	0.0004	0.0004	0.0002	0.0002
Wet	Material Transfer to Feed Bin	NF	8.0	tons	0.00075	0.00035	0.00005	lbs/ton	--	0.006	0.006	0.003	0.003	0.0004	0.0004
			1	hours	--	--	--	--	--	--	--	--	--	--	--
Sawdust Drying Area 122															
Dry	Material Transfer to Fuel Bin	NF	2.0	ODT	0.0015	0.0007	0.0001	lbs/ODT	--	0.003	0.003	0.001	0.001	0.0002	0.0002
			1	hours	--	--	--	--	--	--	--	--	--	--	--
Wet	Material Transfer to Dryer Infeed Bin	NF	8.0	tons	0.00075	0.00035	0.00005	lbs/ton	--	0.01	0.01	0.003	0.003	0.0004	0.0004
			1	hours	--	--	--	--	--	--	--	--	--	--	--
Wet	Material Transfer to Sawdust Dryer	NF	8.0	tons	0.00075	0.00035	0.00005	lbs/ton	--	0.01	0.01	0.003	0.003	0.0004	0.0004
			1	hours	--	--	--	--	--	--	--	--	--	--	--
340 / 345 / 370	Sawdust Dryer and Sawdust Dryer Burner w/Cyclone	NF	1	hours	11.1	11.1	11.1	lbs/hr	--	--	11.10	--	11.10	--	11.10
Pellet Production Area 456															
Dry	Material Transfer to KD Feed Bin	NF	8.0	ODT	0.0015	0.0007	0.0001	lbs/ODT	--	0.01	0.01	0.006	0.006	0.0008	0.0008
			1	hours	--	--	--	--	--	--	--	--	--	--	--
Dry	Material Transfer to Dry Hammermill	NF	8.0	ODT	0.0015	0.0007	0.0001	lbs/ODT	--	0.01	0.01	0.006	0.006	0.0008	0.0008
			1	hours	--	--	--	--	--	--	--	--	--	--	--
261 / 265	Dry Hammermill w/Cyclone	NF	8.0	tons	0.067	0.0335	0.0335	lbs/ton	--	--	0.54	--	0.27	--	0.27
			1	hours						--	--	--	--	--	--
Dry	Conveyor to Conveyor Transfer	NF	8.0	ODT	0.0015	0.0007	0.0001	lbs/ODT	--	0.01	0.01	0.006	0.006	0.0008	0.0008

Table F.5 Maximum Hourly Particulate Emissions

EMISSION SOURCE		NON-FUG. (NF) / FUG. (F)	HOURLY MAXIMUM CAPACITY / PROCESS RATE	UNITS	EMISSION FACTORS				CONTROL EFF. (%)	PM EMISSIONS (LBS/HR)		PM_{10} EMISSIONS (LBS/HR)		$PM_{2.5}$ EMISSIONS (LBS/HR)	
ID	PROCESS DESCRIPTION				PM	PM_{10}	$PM_{2.5}$	UNITS		UNCONTROLLED	CONTROLLED	UNCONTROLLED	CONTROLLED	UNCONTROLLED	CONTROLLED
			1	hours	--	--	--	--	--	--	--	--	--	--	--
Dry	Material Transfer to Pellet Cooler	NF	8.0	ODT	0.0015	0.0007	0.0001	lbs/ODT	--	0.01	0.01	0.006	0.006	0.0008	0.0008
			1	hours	--	--	--	--	--	--	--	--	--	--	--
550 / 552	Pellet Cooler w/Cyclone	NF	8.0	tons	0.419	0.239	0.239	lbs/ton	--	--	3.35	--	1.91	--	1.91
			1	hours						--	--	--	--	--	--
Dry	Material Transfer to Storage Silo	NF	8	ODT	0.0015	0.0007	0.0001	lbs/ODT	--	0.01	0.01	0.006	0.006	0.0008	0.0008
			1	hours	--	--	--	--	--	--	--	--	--	--	--
Pellet Screening & Packaging Area 10															
Dry	Material Transfer to Bagging Equipment	NF	8.0	ODT	0.0015	0.0007	0.0001	lbs/ODT	--	0.01	0.01	0.006	0.006	0.0008	0.0008
			1	hours	--	--	--	--	--	--	--	--	--	--	--
817 / 740	Screening and Bagging Equipment w/Cyclone	NF	8.0	tons	0.0033	0.0008	0.0008	lbs/ton	80%	0.03	0.01	--	--	--	--
			1	hours					60%	--	--	0.01	0.003	--	--
									20%	--	--	--	--	0.01	0.01
TOTAL NON-FUGITIVE EMISSIONS:										**0.12**	**15.09**	**0.05**	**13.33**	**0.01**	**13.29**
TOTAL FUGITIVE EMISSIONS:										**0.06**	**0.06**	**0.026**	**0.026**	**0.004**	**0.004**
TOTAL EMISSIONS:										**0.17**	**15.14**	**0.08**	**13.35**	**0.02**	**13.30**

Table F.6 Maximum Annual Gaseous Emissions

EMISSION SOURCE		NON-FUG. (NF) / FUG. (F)	ANNUAL MAXIMUM CAPACITY / PROCESS RATE	UNITS	EMISSION FACTORS								GASEOUS EMISSIONS (TPY)						
ID	PROCESS DESCRIPTION				CO	NO_X	SO_2	VOC	CO_2	CH_4	N_2O	EF UNITS	CO	NO_X	SO_2	VOC	CO_2	CH_4	N_2O
340 / 345 / 370	Sawdust Dryer Burner w/Cyclone - Wood Combustion [a]	NF	8,760	hours	0.68	0.58	0	0.9	--	--	--	lbs/ODT	23.83	20.32	0	31.54	--	--	--
			8.0	ODT/hr					93.8	0.007	0.0036	kg/MMBtu	--	--	--	--	27,177	2.09	1.04
			30	MMBtu/hr									--	--	--	--	--	--	--
TOTAL NON-FUGITIVE EMISSIONS:													**23.83**	**20.32**	**0.00**	**31.54**	**27,177**	**2.09**	**1.04**
TOTAL FUGITIVE EMISSIONS:													**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL EMISSIONS:													**23.83**	**20.32**	**0.00**	**31.54**	**27,177**	**2.09**	**1.04**

[a] Wood fuel combustion comprises the majority of Sawdust Dryer Burner operation and results in the greatest emissions. Diesel fuel ignited by a propane pilot flame is combusted together with the wood only during cold startups. The propane burns for only a few minutes to ignite the diesel fuel. Once operating temperatures are achieved (approximately 30 minutes), the diesel is turned off as it is no longer required to sustain wood fuel combustion.

Table F.7 Maximum Hourly Gaseous Emissions

EMISSION SOURCE		NON-FUG. (NF) / FUG. (F)	HOURLY MAXIMUM CAPACITY / PROCESS RATE	UNITS	EMISSION FACTORS								GASEOUS EMISSIONS (LBS/HR)						
ID	PROCESS DESCRIPTION				CO	NO_X	SO_2	VOC	CO_2	CH_4	N_2O	EF UNITS	CO	NO_X	SO_2	VOC	CO_2	CH_4	N_2O
340 / 345 / 370	Sawdust Dryer Burner w/Cyclone - Wood Combustion [a]	NF	1	hours	0.68	0.58	0	0.9	--	--	--	lbs/ODT	5.44	4.64	0	7.20	--	--	--
			8.0	ODT/hr					93.8	0.007	0.0036	kg/MMBtu					6,205	0.48	0.24
			30	MMBtu/hr															
TOTAL NON-FUGITIVE EMISSIONS:													**5.44**	**4.64**	**0.00**	**7.20**	**6,205**	**0.48**	**0.24**
TOTAL FUGITIVE EMISSIONS:													**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL EMISSIONS:													**5.44**	**4.64**	**0.00**	**7.20**	**6,205**	**0.48**	**0.24**

[a] Wood fuel combustion comprises the majority of Sawdust Dryer Burner operation and results in the greatest emissions. Diesel fuel ignited by a propane pilot flame is combusted together with the wood only during cold startups. The propane burns for only a few minutes to ignite the diesel fuel. Once operating temperatures are achieved (approximately 30 minutes), the diesel is turned off as it is no longer required to sustain wood fuel combustion.

Table F.8 Maximum Annual Hazardous Air Pollutant Emissions

EMISSION SOURCE		NON-FUG. (NF) / FUG. (F)	ANNUAL MAXIMUM CAPACITY / PROCESS RATE	UNITS	HAP INFORMATION			EMISSIONS (TPY)
ID	PROCESS DESCRIPTION				HAP NAME	EF	EF UNITS	
340 / 345 / 370	Sawdust Dryer Burner w/Cyclone - Wood Combustion [a]	NF	8,760	hours	1,1,1-Trichloroethane	0.000012	lbs/ODT	4.20E-04
			8.0	ODT/hr	Acetaldehyde	0.013	lbs/ODT	4.56E-01
					Acrolein	0.0045	lbs/ODT	1.58E-01
					Benzene	0.00099	lbs/ODT	3.47E-02
					Biphenyl	0.000039	lbs/ODT	1.37E-03
					Bromomethane	0.000028	lbs/ODT	9.81E-04
					Carbon Disulfide	0.000018	lbs/ODT	6.31E-04
					Carbon Tetrachloride	0.000012	lbs/ODT	4.20E-04
					Chloromethane	0.00011	lbs/ODT	3.85E-03
					Cumene	0.000069	lbs/ODT	2.42E-03
					Ethyl Benzene	0.0000038	lbs/ODT	1.33E-04
					Formaldehyde	1.65E-02	lbs/ODT	5.78E-01
					m-, p-Xylene	5.50E-04	lbs/ODT	1.93E-02
					Methanol	1.40E-02	lbs/ODT	4.91E-01

Table F.8 Maximum Annual Hazardous Air Pollutant Emissions

EMISSION SOURCE		NON-FUG. (NF) / FUG. (F)	ANNUAL MAXIMUM CAPACITY / PROCESS RATE	UNITS	HAP INFORMATION			EMISSIONS (TPY)
ID	PROCESS DESCRIPTION				HAP NAME	EF	EF UNITS	
40 / 345 / 37	Sawdust Dryer Burner w/Cyclone - Wood Combustion (cont'd.)				Methyl Ethyl Ketone	4.90E-03	lbs/ODT	1.72E-01
					Methyl Isobutyl Ketone	2.40E-03	lbs/ODT	8.41E-02
					Methylene Chloride	6.30E-04	lbs/ODT	2.21E-02
					n-Hexane	2.60E-05	lbs/ODT	9.11E-04
					o-Xylene	1.40E-05	lbs/ODT	4.91E-04
					Phenol	6.60E-03	lbs/ODT	2.31E-01
					Propionaldehyde	3.20E-03	lbs/ODT	1.12E-01
					Styrene	1.20E-04	lbs/ODT	4.20E-03
					Toluene	2.10E-03	lbs/ODT	7.36E-02
					Total HAPs	6.98E-02	lbs/ODT	2.45E+00
GREATEST SINGLE HAP EMISSIONS:					**Formaldehyde**	**--**		**0.58**
LEAD EMISSIONS:								**0**
TOTAL NON-FUGITIVE EMISSIONS:								**2.45**
TOTAL FUGITIVE EMISSIONS:								**0**
TOTAL EMISSIONS:								**2.45**

Table F.9 Maximum Hourly Hazardous Air Pollutant Emissions

EMISSION SOURCE		NON-FUG. (NF) / FUG. (F)	HOURLY MAXIMUM CAPACITY / PROCESS RATE	UNITS	HAP INFORMATION			EMISSIONS (LBS/HR)
ID	PROCESS DESCRIPTION				HAP NAME	EF	EF UNITS	
340 / 345 / 370	Sawdust Dryer Burner w/Cyclone - Wood Combustion [a]	NF	1	hours	1,1,1-Trichloroethane	0.000012	lbs/ODT	9.60E-05
			8.0	ODT/hr	Acetaldehyde	0.013	lbs/ODT	1.04E-01
					Acrolein	0.0045	lbs/ODT	3.60E-02
					Benzene	0.00099	lbs/ODT	7.92E-03
					Biphenyl	0.000039	lbs/ODT	3.12E-04
					Bromomethane	0.000028	lbs/ODT	2.24E-04
					Carbon Disulfide	0.000018	lbs/ODT	1.44E-04
					Carbon Tetrachloride	0.000012	lbs/ODT	9.60E-05
					Chloromethane	0.00011	lbs/ODT	8.80E-04
					Cumene	0.000069	lbs/ODT	5.52E-04
					Ethyl Benzene	0.0000038	lbs/ODT	3.04E-05
					Formaldehyde	1.65E-02	lbs/ODT	1.32E-01
					m-, p-Xylene	5.50E-04	lbs/ODT	4.40E-03
					Methanol	1.40E-02	lbs/ODT	1.12E-01

Table F.9 Maximum Hourly Hazardous Air Pollutant Emissions

EMISSION SOURCE		NON-FUG. (NF) / FUG. (F)	HOURLY MAXIMUM CAPACITY / PROCESS RATE	UNITS	HAP INFORMATION			EMISSIONS (LBS/HR)
ID	PROCESS DESCRIPTION				HAP NAME	EF	EF UNITS	
40 / 345 / 37	Sawdust Dryer Burner w/Cyclone - Wood Combustion (cont'd.)				Methyl Ethyl Ketone	4.90E-03	lbs/ODT	3.92E-02
					Methyl Isobutyl Ketone	2.40E-03	lbs/ODT	1.92E-02
					Methylene Chloride	6.30E-04	lbs/ODT	5.04E-03
					n-Hexane	2.60E-05	lbs/ODT	2.08E-04
					o-Xylene	1.40E-05	lbs/ODT	1.12E-04
					Phenol	6.60E-03	lbs/ODT	5.28E-02
					Propionaldehyde	3.20E-03	lbs/ODT	2.56E-02
					Styrene	1.20E-04	lbs/ODT	9.60E-04
					Toluene	2.10E-03	lbs/ODT	1.68E-02
					Total HAPs	6.98E-02	lbs/ODT	5.59E-01
GREATEST SINGLE HAP EMISSIONS:					**Formaldehyde**	**--**		**0.13**
LEAD EMISSIONS:								**0**
TOTAL NON-FUGITIVE EMISSIONS:								**0.56**
TOTAL FUGITIVE EMISSIONS:								**0**
TOTAL EMISSIONS:								**0.56**

Table F.10 Facility-Wide Emissions

	Category of Emissions	PM	PM_{10}	$PM_{2.5}$	CO	NO_X	SO_2	VOC	CO_2e [a]	Lead	Greatest Single HAP [b]	Total HAPs
Potential Hourly Emissions (lbs/hr)	Non-Fugitive	15.09	13.33	13.29	5.44	4.64	0.00	7.20	6,288	0.0000	0.13	0.56
	Fugitive	0.06	0.03	0.00	0	0	0	0	0	0	0	0
	Total	15.14	13.35	13.30	5.44	4.64	0.00	7.20	6,288	0.0000	0.13	0.56
Potential Annual Emissions (tpy)	Non-Fugitive	66.08	58.37	58.22	23.83	20.32	0.00	31.54	27,540	0.0000	0.58	2.45
	Fugitive	0.01	0.00	0.00	0	0	0	0	0	0	0	0
	Total	66.09	58.37	58.22	23.83	20.32	0.00	31.54	27,540	0.0000	0.58	2.45
	PTE [c]	66.08	58.37	58.22	23.83	20.32	0.00	31.54	27,540	0.0000	0.58	2.45

[a] CO_2e emissions are calculated by summing the individual greenhouse gas emissions multiplied by their GWP. GWP of CO_2 = 1, GWP of CH_4 = 25, GWP of N_2O = 298.

[b] Methanol has the greatest potential emissions of any single facility-wide HAP on an annual and hourly basis.

[c] For PM, PM_{10}, $PM_{2.5}$, CO, NO_X, SO_2, VOC, and CO_2e, the PTE of the Forest Energy Corporation facility includes all non-fugitive emission units. For HAPs, the PTE includes all non-fugitive and fugitive emission sources.

APPENDIX G APPLICATION ADMINISTRATIVE COMPLETENESS CHECKLIST

REQUIREMENT		MEETS REQUIREMENT?			COMMENT
		YES	NO	N/A	
1.	Has the standard application form been completed?	X			See Appendix A.
2.	Has the responsible official signed the standard application form?	X			See Appendix A.
3.	Has a process description been provided?	X			See Section 2.
4.	Are the facility's emissions documented with all appropriate supporting information?	X			See Section 5 and Appendices C, E, and F.
5.	Is the facility subject to Minor NSR requirements? [If the answer is "Yes," answer 6a, 6b, and 6c, as applicable. If the answer is "No," skip to 7.]		X		See Section 10.
6.a	If the facility chooses to implement RACT, is the RACT determination included for the affected pollutants for all affected emission units?			X	The facility is not subject to minor NSR requirements.
6.b	If the facility chooses to demonstrate compliance with NAAQS by screen modeling, is the modeling analysis included?				
6.c	If refined modeling has been conducted, is a comprehensive modeling report along with all modeling files included?				
7.	Does the application include an equipment list with the type, name, make, model, serial number, maximum rated capacity, and date of manufacture?	X			See Appendix B.
8.	Does the application include an identification and description of pollution controls? (if applicable)	X			See Section 4.
9.	For any application component claimed as confidential, are the requirements of A.R.S. 49-432 and A.A.C. R18-2-305 addressed?			X	See Section 11.
10.	For any current non-compliance issue, is a compliance schedule attached?			X	See Section 9.
11.	For minor permit revision that will make a modification upon submittal of application, has a suggested draft permit been attached?			X	The application is not an MPR application.