✓#1339 AD

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DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE A.Q. PROGRAM

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

Cover Sheet for Air Permit Application – Permit to Construct **Form CSPTC**

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

COMPANY NAME, FACILITY NAME, AND FACILITY ID NUMBER

1. Company Name	Tri-Pro Forest Products, Inc.		
2. Facility Name	Oldtown Operation	3. Facility ID No.	017-00006
4. Brief Project Description - One sentence or less	Conversion of Tier II to PTC in Renewal		

PERMIT APPLICATION TYPE

5. ☐ New Source ☐ New Source at Existing Facility ☐ PTC for a Tier I Source Processed Pursuant to IDAPA 58.01.01.209.05.c
☐ Unpermitted Existing Source ☐ Facility Emissions Cap ☒ Modify Existing Source: Permit No.: T2-050126 Date Issued: May 24, 2006
☐ Required by Enforcement Action: Case No.: ____

6. ☒ Minor PTC ☐ Major PTC

FORMS INCLUDED

Included	N/A	Forms		DEQ Verify
☒	☐	Form CSPTC – Cover Sheet		☐
☒	☐	Form GI – Facility Information		☐
☒	☐	Form EU0 – Emissions Units General		☐
☐	☒	Form EU1– Industrial Engine Information	Please specify number of EU1s attached: ____	☐
☐	☒	Form EU2– Nonmetallic Mineral Processing Plants	Please specify number of EU2s attached: ____	☐
☐	☒	Form EU3– Spray Paint Booth Information	Please specify number of EU3s attached: ____	☐
☐	☒	Form EU4– Cooling Tower Information	Please specify number of EU4s attached: ____	☐
☒	☐	Form EU5 – Boiler Information	Please specify number of EU5s attached: 1	☐
☐	☒	Form CBP– Concrete Batch Plant	Please specify number of CBPs attached: ____	☐
☐	☒	Form HMAP – Hot Mix Asphalt Plant	Please specify number of HMAPs attached: ____	☐
☐	☒	PERF – Portable Equipment Relocation Form		☐
☐	☒	Form AO – Afterburner/Oxidizer		☐
☐	☒	Form CA – Carbon Adsorber		☐
☒	☐	Form CYS – Cyclone Separator		☐
☐	☒	Form ESP – Electrostatic Precipitator		☐
☐	☒	Form BCE– Baghouses Control Equipment		☐
☐	☒	Form SCE– Scrubbers Control Equipment		☐
☐	☒	Form VSCE – Venturi Scrubber Control Equipment		☐
☐	☒	Form CAM – Compliance Assurance Monitoring		☐
☒	☐	Forms EI– Emissions Inventory		☐
☒	☐	PP – Plot Plan		☐
☐	☒	Forms MI1 – MI4 – Modeling	(Excel workbook, all 4 worksheets)	☐
☒	☐	Form FRA – Federal Regulation Applicability		☐

Appendices: A. Emissions Calculations
B. Regulatory Review
C. Process Flow Diagram

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General Information **Form GI**
Revision 7
6/29/12

Please see instructions on back page before filling out the form. All information is required. If information is missing, the application will not be processed.

Identification

1. Facility name: Oldtown Operation

2. Existing facility identification number: 017-00006

☐ **Check if new facility (not yet operating)**

3. Brief project description: Conversion of Tier II to PTC in Renewal

Facility Information

4. Primary facility permitting contact name: Steve Linton
Contact type: Responsible official
Telephone number: (208) 437-2412
E-mail: stevel@triproforest.com

5. Alternate facility permitting contact name: Beth Hodgson
Alternate contact type: Facility permitting contact
Telephone number: (509) 328-7500
E-mail: beth@springenvironmental.com

6. Mailing address where permit will be sent (street/city/county/state/zip code): 1122 Highway 2, Oldtown, ID 83822

7. Physical address of permitted facility (if different than mailing address) (street/ city/county/state/zip code): Same

8. Is the equipment portable? ☐ **Yes*** ☒ **No** ***If yes, complete and attach PERF; see instructions.**

9. NAICS codes: Primary NAICS: 321113
Secondary NAICS:

10. Brief business description and principal product produced: 35 acre lumber (principally cedar) remanufacturing facility with 3.0 MMBF capacity.

11. Identify any adjacent or contiguous facility this company owns and/or operates: N/A

12. Specify type of application ☒ **Permit to construct (PTC); application fee of $1,000 required. See instructions.**

☐ **Tier I permit** ☐ **Tier II permit** ☐ **Tier II/Permit to construct**

For Tier I permitted facilities only: If you are applying for a PTC then you must also specify how the PTC will be incorporated into the Tier I permit.

☐ **Co-process Tier I modification and PTC** ☐ **Incorporate PTC at the time of Tier I renewal** ☐ **Administratively amend the Tier I permit to incorporate the PTC upon applicant's request (IDAPA 58.01.01.209.05.a, b, or c)**

Certification

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

13. Responsible official's name: Daniel Steve Linton
Official's title: President
Official's address: 1122 Highway 2, Oldtown, ID 83822
Telephone number: (208) 437-2412
E-mail: stevel@triproforest.com
Official's signature:
Date: 3-17-16

☒ **14. Check here to indicate that you want to review the draft permit before final issuance.**

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

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

IDENTIFICATION		
1. Company Name: Tri-Pro Forest Products, Inc.	2. Facility Name: Oldtown Operation	3. Facility ID No: 017-00006
4. Brief Project Description:	Conversion of Tier II to PTC in Renewal	

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION		
5.	Emissions Unit (EU) Name:	Lumber Drying Kilns (x10)
6.	EU ID Number:	KILN
7.	EU Type:	☐ New Source ☐ Unpermitted Existing Source ☒ Modification to a Permitted Source -- Previous Permit #:T2-050126 Date Issued: May 24, 2006
8.	Manufacturer:	TRI-PRO CEDAR PRODUCTS
9.	Model:	KILNS
10..	Maximum Capacity:	90 MMBF/YEAR
11.	Date of Construction:	CY 2000
12.	Date of Modification (if any):	N/A
13.	Is this a Controlled Emission Unit?	☒ No ☐ Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT						
14. Control Equipment Name and ID:	N/A					
15. Date of Installation:	N/A	16. Date of Modification (if any):	N/A			
17. Manufacturer and Model Number:	N/A					
18. ID(s) of Emission Unit Controlled:	N/A					
19. Is operating schedule different than emission units(s) involved?	☐ Yes ☐ No					
20. Does the manufacturer guarantee the control efficiency of the control equipment?	☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)					

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency	N/A	N/A	N/A	N/A	N/A	N/A

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

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)		
22.	Actual Operation:	24 HRS/DAY, 365 DAYS/YEAR
23.	Maximum Operation:	24 HRS/DAY, 365 HRS/YEAR

REQUESTED LIMITS		
24.	Are you requesting any permit limits?	☒ Yes ☐ No (If Yes, indicate all that apply below)
	☐ Operation Hour Limit(s):	
	☒ Production Limit(s):	90 MMBF/YEAR
	☐ Material Usage Limit(s):	
	☐ Limits Based on Stack Testing:	Please attach all relevant stack testing summary reports
	☐ Other:	
25.	Rationale for Requesting the Limit(s):	PRE-EXISTING OPERATING LIMIT

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

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

IDENTIFICATION		
1. Company Name: Tri-Pro Forest Products, Inc.	2. Facility Name: Oldtown Operation	3 Facility ID No: 017-00006
4. Brief Project Description:	Conversion of Tier II to PTC in Renewal	

EXEMPTION

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

BOILER (EMISSION UNIT) DESCRIPTION AND SPECIFICATIONS

5. Type of Request: ☐ New Unit ☐ Unpermitted Existing Unit ☒ Modification to a Unit with Permit #:T2-050126		
6. Use of Boiler: ☐ % Used For Process ☒ % Used For Space Heat ☐ % Used For Generating Electricity ☐ Other:		
7. Boiler ID Number: PROPANE	8. Rated Capacity: ☒ 7.87 Million British Thermal Units Per Hour (MMBtu/hr) ☐ 1,000 Pounds Steam Per Hour (1,000 lb steam/hr)	
9. Construction Date: 2000	10. Manufacturer: Cleaver Brooks	11. Model: NA
12. Date of Modification (if applicable): NA	13. Serial Number (if available): NA	14. Control Device (if any): NONE **Note: Attach applicable control equipment form(s)**

FUEL DESCRIPTION AND SPECIFICATIONS

15. Fuel Type	☐ Diesel Fuel (#) (gal/hr)	☐ Natural Gas (cf/hr)	☐ Coal (unit: /hr)	☒ Other Fuels (unit:gal /hr)
16. Full Load Consumption Rate				86
17. Actual Consumption Rate				86
18. Fuel Heat Content (Btu/unit, LHV)				91.5 MMbtu/ 1000gal
19. Sulfur Content wt%				0.0015%
20. Ash Content wt%		N/A		N/A

STEAM DESCRIPTION AND SPECIFICATIONS

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

OPERATING LIMITS & SCHEDULE

25. Imposed Operating Limits (hours/year, or gallons fuel/year, etc.):	None
26. Operating Schedule (hours/day, months/year, etc.):	No Limit - 8760 hr/year
27. NSPS Applicability: ☐ Yes ☒ No	If Yes, which subpart:

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Cyclone Separator - **Form CYS**
Revision 2
08/28/08

Please see instructions on page 3 before filling out the form.

IDENTIFICATION

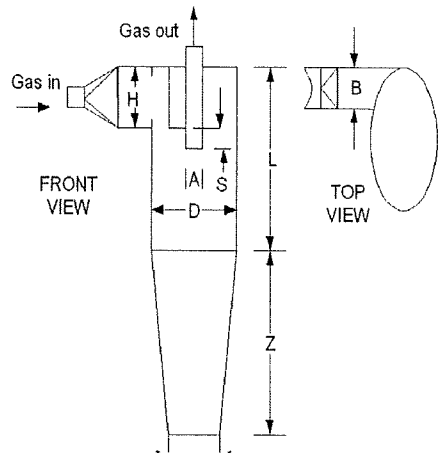
1. Company Name:	Tri-Pro Forest Products, Inc.	2. Facility Name:	Oldtown Operation	3. Facility ID No.:	017-00006
4. Brief Project Description:	Conversion of Tier II to PTC in Renewal				

CYCLONE SEPARATOR INFORMATION

Equipment Description

5. Manufacturer:	Tri-Pro Cedar	6. Model Number:	Cyclone #2

7. Dimensions



Give dimensions of cyclone. (See sample diagram above.)

1. B: 12 in.
2. H: 48 in.
3. S: 24 in.
4. L: 72 in.
5. Z: 120 in.
6. D: 96 in.
7. A: 36 in.
8. J: in.

8. Particulate Size Distribution Data

Micron range	Particle size distribution weight %	Manufacturer's guaranteed removal efficiency for each micron range
0.5-1.0		N/A
1.0-5.0		N/A
5-10		N/A
10-20		N/A
Over 20		N/A

9. Type of Cyclone	☐ Wet	☒ Dry
10. Type of Cyclone Unit	☒ Single ☐ Dual	☐ Quadruple ☐ Multiclone
11. Blower	Blower horsepower: 100 hp Design flow rate: 18,500 scfm Draft: ☒ Forced ☐ Induced	
12. Design Criteria	Cyclone configuration: ☒ Positive pressure	☐ Negative pressure
13. Pre-Treatment Device	☐ Cyclone ☐ Knock-out chamber ☐ Precooler ☒ None ☐ Preheater	
14. Post-Treatment Device	☐ Baghouse/Cartridge ☐ HEPA ☐ Other: None	

Process Stream Characteristics	
15. Brief Description of Process	Shavings are collected through Cyclone #7 and Cyclone #2 from the planers and trimmers in the Old Planer Building and are sent pneumatically to Shavings Bin #2 before being hauled off the site.
16. Flow Data	Gas stream temperature: AMBIENT degrees F Moisture content: grams of water/cubic feet (ft^3) of dry air Pressure drop range High: in. H_2O Low: in. H_2O Dew point temperature of process stream: degrees F Inlet flow rate: ACFM
17. Dust Collection Device	☐ Pneumatic conveyor ☒ Rotary airlock values ☐ Screw conveyors ☐ Closed container ☐ Double dump ☐ Drag conveyor ☐ Manual discharge device: ☐ Slide gate OR ☐ Hinged doors or drawers
18. Operating Schedule	Normal: 24 hours/day 7 days/week 52 weeks/year Maximum: 24 hours/day 7 days/week 52 weeks/year

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Cyclone Separator - **Form CYS**
Revision 2
08/28/08

Please see instructions on page 3 before filling out the form.

IDENTIFICATION

1. Company Name:	Tri-Pro Forest Products, Inc.	2. Facility Name:	Oldtown Operation	3. Facility ID No.:	017-00006
4. Brief Project Description:	Conversion of Tier II to PTC in Renewal				

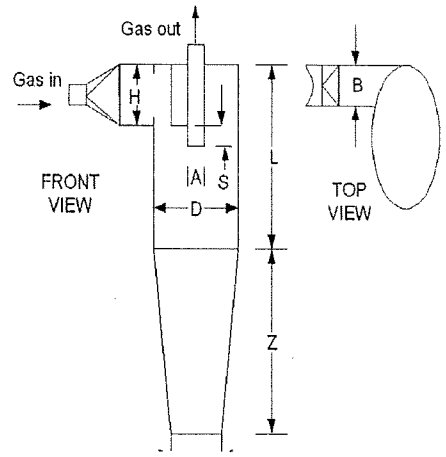
CYCLONE SEPARATOR INFORMATION

Equipment Description

5. Manufacturer: Tri-Pro Cedar

6. Model Number: Cyclone #3

7. Dimensions



Give dimensions of cyclone. (See sample diagram above.)

1. B: 12 in.
2. H: 24 in.
3. S: 20 in.
4. L: 48 in.
5. Z: 108 in.
6. D: 72 in.
7. A: 24 in.
8. J: in.

8. Particulate Size Distribution Data

Micron range	Particle size distribution weight %	Manufacturer's guaranteed removal efficiency for each micron range
0.5-1.0		N/A
1.0-5.0		N/A
5-10		N/A
10-20		N/A
Over 20		N/A

9. Type of Cyclone: ☐ Wet ☒ Dry

10. Type of Cyclone Unit: ☒ Single ☐ Quadruple ☐ Dual ☐ Multiclone

11. Blower: Blower horsepower: 40 hp
Design flow rate: 23,000 scfm
Draft: ☒ Forced ☐ Induced

12. Design Criteria: Cyclone configuration: ☒ Positive pressure ☐ Negative pressure

13. Pre-Treatment Device: ☐ Cyclone ☐ Knock-out chamber ☐ Precooler ☒ None ☐ Preheater

14. Post-Treatment Device: ☐ Baghouse/Cartridge ☐ HEPA ☐ Other: None

Process Stream Characteristics	
15. Brief Description of Process	The residual from PB3 is collected by Cyclone #3. These join the stream of shavings being sent pneumatically from Cyclone #5 and are altogether routed through Cyclone #4 and deposited in Shavings Bin #1
16. Flow Data	Gas stream temperature: Ambient degrees F Moisture content: grams of water/cubic feet (ft^3) of dry air Pressure drop range High: in. H_2O Low: in. H_2O Dew point temperature of process stream: degrees F Inlet flow rate: ACFM
17. Dust Collection Device	☒ Pneumatic conveyor ☐ Rotary airlock values ☐ Screw conveyors ☐ Closed container ☐ Double dump ☐ Drag conveyor ☐ Manual discharge device: ☐ Slide gate OR ☐ Hinged doors or drawers
18. Operating Schedule	Normal: 24 hours/day 7 days/week 52 weeks/year Maximum: 24 hours/day 7 days/week 52 weeks/year

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Cyclone Separator - **Form CYS**
Revision 2
08/28/08

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IDENTIFICATION

1. Company Name:	Tri-Pro Forest Products, Inc.	2. Facility Name:	Oldtown Operation	3. Facility ID No.:	017-00006
4. Brief Project Description:	Conversion of Tier II to PTC in Renewal				

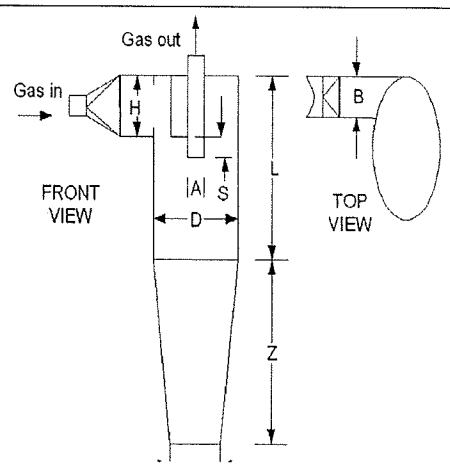
CYCLONE SEPARATOR INFORMATION

Equipment Description

5. Manufacturer: Tri-Pro Cedar

6. Model Number: Cyclone #4

7. Dimensions



Give dimensions of cyclone. (See sample diagram above.)

1. B: 30 in.
2. H: 48 in.
3. S: 48 in.
4. L: 120 in.
5. Z: 216 in.
6. D: 144 in.
7. A: 72 in.
8. J: in.

8. Particulate Size Distribution Data

Micron range	Particle size distribution weight %	Manufacturer's guaranteed removal efficiency for each micron range
0.5-1.0		N/A
1.0-5.0		N/A
5-10		N/A
10-20		N/A
Over 20		N/A

9. Type of Cyclone: ☐ Wet ☒ Dry

10. Type of Cyclone Unit: ☒ Single ☐ Quadruple ☐ Dual ☐ Multiclone

11. Blower: Blower horsepower: 150 hp
Design flow rate: 21,000 scfm
Draft: ☒ Forced ☐ Induced

12. Design Criteria: Cyclone configuration: ☒ Positive pressure ☐ Negative pressure

13. Pre-Treatment Device: ☐ Cyclone ☐ Knock-out chamber ☐ Precooler ☒ None ☐ Preheater

14. Post-Treatment Device: ☐ Baghouse/Cartridge ☐ HEPA ☐ Other: NONE

Process Stream Characteristics	
15. Brief Description of Process	Shavings and chips from PB1 and PB3 are collected and separated through Cyclone #5 and Cyclone #3, respectively. The shavings streams from each combine and are routed pneumatically through Cyclone #4 to Shavings Bin #1.
16. Flow Data	Gas stream temperature: AMBIENT degrees F Moisture content: grams of water/cubic feet (ft^3) of dry air Pressure drop range High: in. H_2O Low: in. H_2O Dew point temperature of process stream: degrees F Inlet flow rate: ACFM
17. Dust Collection Device	☐ Pneumatic conveyor ☒ Rotary airlock values ☐ Screw conveyors ☐ Closed container ☐ Double dump ☐ Drag conveyor ☐ Manual discharge device: ☐ Slide gate OR ☐ Hinged doors or drawers
18. Operating Schedule	Normal: 24 hours/day 7 days/week 52 weeks/year Maximum: 24 hours/day 7 days/week 52 weeks/year

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Cyclone Separator - **Form CYS**
Revision 2
08/28/08

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IDENTIFICATION

1. Company Name:	Tri-Pro Forest Products, Inc.	2. Facility Name:	Oldtown Operation	3. Facility ID No.:	017-00006
4. Brief Project Description:	Conversion of Tier II to PTC in Renewal				

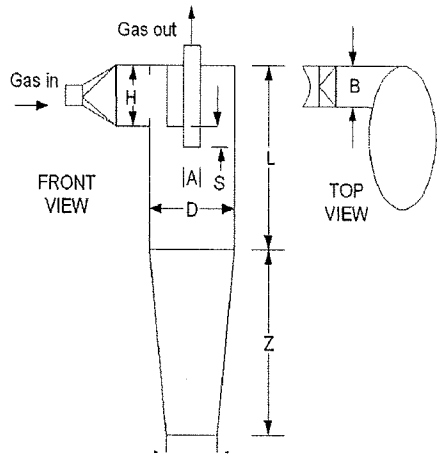
CYCLONE SEPARATOR INFORMATION

Equipment Description

5. Manufacturer: Tri-Pro Cedar

6. Model Number: Cyclone #6

7. Dimensions



Give dimensions of cyclone. (See sample diagram above.)

1. B: 12 in.
2. H: 30 in.
3. S: 24 in.
4. L: 48 in.
5. Z: 96 in.
6. D: 72 in.
7. A: 24 in.
8. J: in.

8. Particulate Size Distribution Data

Micron range	Particle size distribution weight %	Manufacturer's guaranteed removal efficiency for each micron range
0.5-1.0		N/A
1.0-5.0		N/A
5-10		N/A
10-20		N/A
Over 20		N/A

9. Type of Cyclone: ☐ Wet ☒ Dry

10. Type of Cyclone Unit: ☒ Single ☐ Quadruple ☐ Dual ☐ Multiclone

11. Blower: Blower horsepower: 100 hp
Design flow rate: 8,000 scfm
Draft: ☒ Forced ☐ Induced

12. Design Criteria: Cyclone configuration: ☒ Positive pressure ☐ Negative pressure

13. Pre-Treatment Device: ☐ Cyclone ☐ Knock-out chamber ☐ Precooler ☒ None ☐ Preheater

14. Post-Treatment Device: ☐ Baghouse/Cartridge ☐ HEPA ☐ Other: None

Process Stream Characteristics	
15. Brief Description of Process	Chips from a hog chipper in the Old Planer Building are routed through Cyclone #6 and into the Chip Bin.
16. Flow Data	Gas stream temperature: AMBIENT degrees F Moisture content: grams of water/cubic feet (ft^3) of dry air Pressure drop range High: in. H_2O Low: in. H_2O Dew point temperature of process stream: degrees F Inlet flow rate: ACFM
17. Dust Collection Device	☐ Pneumatic conveyor ☒ Rotary airlock values ☐ Screw conveyors ☐ Closed container ☐ Double dump ☐ Drag conveyor ☐ Manual discharge device: ☐ Slide gate OR ☐ Hinged doors or drawers
18. Operating Schedule	Normal: 24 hours/day 7 days/week 52 weeks/year Maximum: 24 hours/day 7 days/week 52 weeks/year

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IDENTIFICATION

1. Company Name:	Tri-Pro Forest Products, Inc.	2. Facility Name:	Oldtown Operation	3. Facility ID No.:	017-00006
4. Brief Project Description:	Conversion of Tier II to PTC in Renewal				

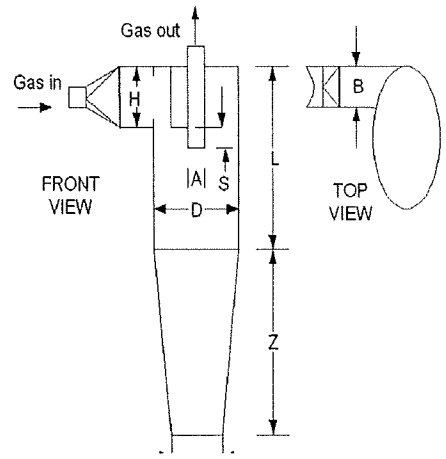
CYCLONE SEPARATOR INFORMATION

Equipment Description

5. Manufacturer: Tri-Pro Cedar

6. Model Number: Cyclone #7

7. Dimensions



Give dimensions of cyclone. (See sample diagram above.)

1. B: 18 in.	5. Z: 72 in.
2. H: 36 in.	6. D: 96 in.
3. S: 24 in.	7. A: 36 in.
4. L: 72 in.	8. J: in.

8. Particulate Size Distribution Data

Micron range	Particle size distribution weight %	Manufacturer's guaranteed removal efficiency for each micron range
0.5-1.0		N/A
1.0-5.0		N/A
5-10		N/A
10-20		N/A
Over 20		N/A

9. Type of Cyclone: ☐ Wet ☒ Dry

10. Type of Cyclone Unit: ☒ Single ☐ Quadruple ☐ Dual ☐ Multiclone

11. Blower: Blower horsepower: 150 hp
Design flow rate: 7,200 scfm
Draft: ☒ Forced ☐ Induced

12. Design Criteria: Cyclone configuration: ☒ Positive pressure ☐ Negative pressure

13. Pre-Treatment Device: ☐ Cyclone ☐ Knock-out chamber ☐ Precooler ☒ None ☐ Preheater

14. Post-Treatment Device: ☐ Baghouse/Cartridge ☐ HEPA ☐ Other: None

Process Stream Characteristics	
15. Brief Description of Process	Shavings are collected through Cyclone #7 and Cyclone #2 from the planers and trimmers in the Old Planer Building and are sent pneumatically to Shavings Bin #2 before being hauled off the site.
16. Flow Data	Gas stream temperature: AMBIENT degrees F Moisture content: grams of water/cubic feet (ft^3) of dry air Pressure drop range High: in. H_2O Low: in. H_2O Dew point temperature of process stream: degrees F Inlet flow rate: ACFM
17. Dust Collection Device	☐ Pneumatic conveyor ☒ Rotary airlock values ☐ Screw conveyors ☐ Closed container ☐ Double dump ☐ Drag conveyor ☐ Manual discharge device: ☐ Slide gate OR ☐ Hinged doors or drawers
18. Operating Schedule	Normal: 24 hours/day 7 days/week 52 weeks/year Maximum: 24 hours/day 7 days/week 52 weeks/year

Please see instructions on page 3 before filling out the form.

IDENTIFICATION

1. Company Name:	Tri-Pro Forest Products, Inc.	2. Facility Name:	Oldtown Operation	3. Facility ID No.:	017-00006
4. Brief Project Description:	Conversion of Tier II to PTC in Renewal				

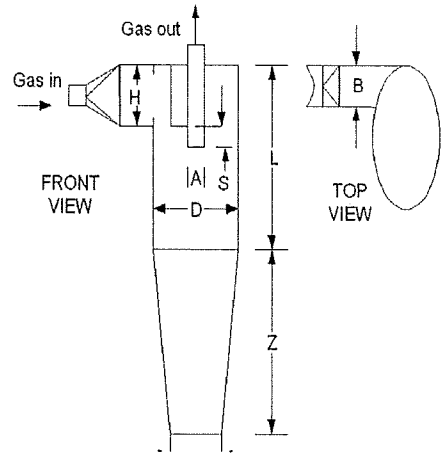
CYCLONE SEPARATOR INFORMATION

Equipment Description

5. Manufacturer: Tri-Pro Cedar

6. Model Number: Cyclone #12

7. Dimensions



Give dimensions of cyclone. (See sample diagram above.)

1. B: 36 in.
2. H: 30 in.
3. S: 24 in.
4. L: 48 in.
5. Z: 72 in.
6. D: 72 in.
7. A: 36 in.
8. J: in.

8. Particulate Size Distribution Data

Micron range	Particle size distribution weight %	Manufacturer's guaranteed removal efficiency for each micron range
0.5-1.0		N/A
1.0-5.0		N/A
5-10		N/A
10-20		N/A
Over 20		N/A

9. Type of Cyclone: ☐ Wet ☒ Dry

10. Type of Cyclone Unit: ☒ Single ☐ Quadruple ☐ Dual ☐ Multiclone

11. Blower: Blower horsepower: 100 hp
Design flow rate: 15,000 scfm
Draft: ☒ Forced ☐ Induced

12. Design Criteria: Cyclone configuration: ☒ Positive pressure ☐ Negative pressure

13. Pre-Treatment Device: ☐ Cyclone ☐ Knock-out chamber ☐ Precooler ☒ None ☐ Preheater

14. Post-Treatment Device: ☐ Baghouse/Cartridge ☐ HEPA ☐ Other: None

Process Stream Characteristics	
15. Brief Description of Process	A dust pickup system collects sawdust and hog chips from the Sawmill Building. The pickup system routes the residue through Cyclone #12 and deposits it into trucks to be shipped elsewhere.
16. Flow Data	Gas stream temperature: AMBIENT degrees F Moisture content: grams of water/cubic feet (ft^3) of dry air Pressure drop range High: in. H_2O Low: in. H_2O Dew point temperature of process stream: degrees F Inlet flow rate: ACFM
17. Dust Collection Device	☐ Pneumatic conveyor ☐ Rotary airlock values ☐ Screw conveyors ☐ Closed container ☐ Double dump ☐ Drag conveyor ☐ Manual discharge device: ☒ Slide gate OR ☐ Hinged doors or drawers
18. Operating Schedule	Normal: 24 hours/day 7 days/week 52 weeks/year Maximum: 24 hours/day 7 days/week 52 weeks/year

Maximum Potential Emissions

Pollutant	Propane Boiler	Drying Kilns	Wood Waste	Fugitives	TOTAL		EL	Exceeds?
Criteria	ton/yr				ton/yr			
PM10	0.26	2.05	7.1	1.6	11			
PM2.5	0.26	2.05	7.1	1.6	11			
NOx	4.90	--	--	--	5			
CO	2.83	--	--	--	3			
SO2	0.003	--	--	--	0			
VOC	0.30	16.90	--	--	17			
HAP	**lb/yr**				**ton/yr**	**lb/hr**	**lb/hr**	**Y/N**
Acetaldehyde	--	9868.50	--	--	4.93	1.13	0.003	Y
Acrolein	--	124.20	--	--	0.06	0.014	0.017	N
Formaldehyde	--	117.00	--	--	0.06	0.013	0.00051	Y
Methanol	--	9858.15	--	--	4.93	1.13	17.3	N
Propionaldehyde	--	98.55	--	--	0.05	0.011	0.03	N
				Total HAPS:	10.03			

Note: See Appendix A for detailed emissions calculations.

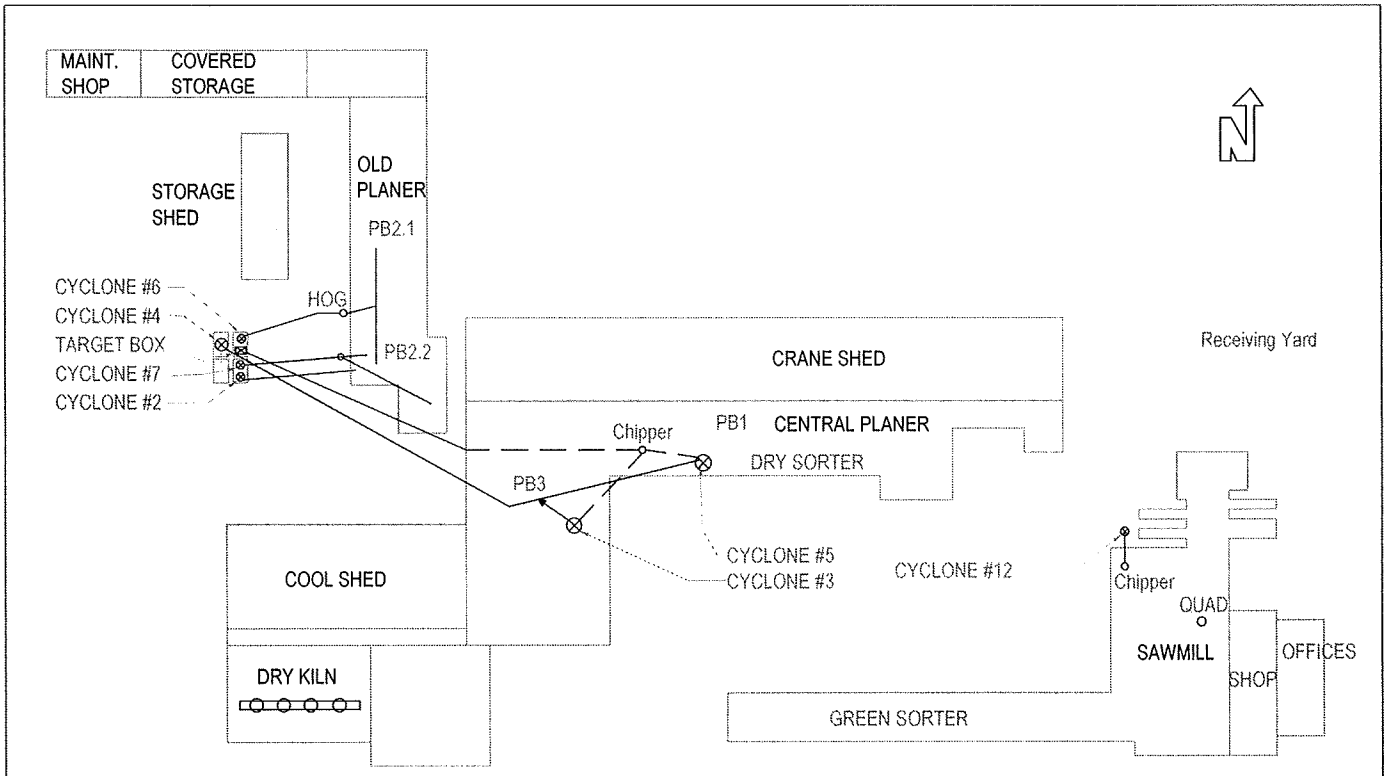


Figure 1: Plant Layout

Tri-Pro Cedar Products
1122 Highway 2
Oldtown, ID 83822

Prepared by: Gabe Sedberry
Drawing Number: TPC-002
Revision Number: March 10, 2016

IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Preapplication Meeting Information Form FRA (Federal Requirements Applicability) - Regulatory Review

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

IDENTIFICATION	
1. Company Name: Tri-Pro Forest Products, Inc.	2. Facility Name: Oldtown Operation
3. Brief Project Description: Conversion of Tier II to PTC in Renewal	

APPLICABILITY DETERMINATION	
4. List all applicable subparts of the New Source Performance Standards (NSPS) (40 CFR part 60). List all non-applicable subparts of the NSPS which may appear to apply to the facility but do not. Examples of NSPS-affected emissions units include internal combustion engines, boilers, turbines, etc. Applicant must thoroughly review the list of affected emissions units.	List of all applicable subpart(s): List of all non-applicable subpart(s) which may appear to apply but do not: ☑ Not Applicable
5. List applicable subpart(s) of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) (40 CFR part 61 and 40 CFR part 63). List all non-applicable subparts of the NESHAP which may appear to apply to the facility but do not. Examples of affected emission units include solvent cleaning operations, industrial cooling towers, paint stripping and miscellaneous surface coating. Reference EPA's webpage on NESHAPs for more information.	List of all applicable subpart(s): List of all non-applicable subpart(s) which may appear to apply but do not: 40 CFR 63 Subpart DDDDD 40 CFR 63 Subpart JJJJJJ ☑ Not Applicable
6. For each subpart identified above, conduct a complete regulatory analysis using the instructions and referencing the example on the following pages. **Note** - Regulatory reviews must be submitted with sufficient detail so that DEQ can verify applicability and document in legal terms why the regulation does or does not apply. Regulatory reviews submitted with insufficient detail will be determined incomplete.	☑ A detailed regulatory review is provided (Follow instructions and example). See Appendix B ☐ DEQ has already been provided a detailed regulatory review. Give a reference to the document including the date.

APPENDIX A

EMISSION INVENTORY

SOURCE - Drying Kilns
Maximum Potential Emissions (including controls)

Production: 90,000,000 BF/yr

Pollutant	Emission Factor[1,2]	Emission Estimate	Emission Estimate	Emission Estimate	Source
Criteria	**(lb/1000 BF)**	**(BF/yr)**	**(ton/yr)**	**(lb/hr)**	
PM	0.05	90,000,000	2.05	0.47	EPA Region 10 Memo
PM10	0.05	90,000,000	2.05	0.47	EPA Region 10 Memo
PM2.5	0.05	90,000,000	2.05	0.47	EPA Region 10 Memo
VOC (as propane)	0.38	90,000,000	16.90	3.86	Oregon DEQ 2014
Toxics			**(lb/yr)**		
VOC (as propane)	0.38	90,000,000	33791	3.86	Oregon DEQ 2014
Acetaldehyde	0.11	90,000,000	9869	1.13	Oregon DEQ 2013
Acrolein	0.0014	90,000,000	124	0.01	Oregon DEQ 2014
Formaldehyde	0.0013	90,000,000	117	0.01	Oregon DEQ 2014
Methanol	0.11	90,000,000	9858	1.13	Oregon DEQ 2014
Propionaldehyde	0.0011	90,000,000	99	0.01	Oregon DEQ 2014

Current Application		Emission Factors		
Tri-Pro Forest Distibution:	%	85.0	15.0	100
Pollutant	**Units**	**West. Cedar**	**Douglas Fir**	**Tri-Pro Cedar**
PM[1,3]	lb/1000 BF	0.05	0.02	0.05
VOC (as propane)[2]	lb/1000 BF	0.31	0.77	0.38
Acetaldehyde[2]	lb/1000 BF	0.12	0.05	0.11
Acrolein[2]	lb/1000 BF	0.0015	0.0007	0.0014
Formaldehyde[2]	lb/1000 BF	0.0013	0.0013	0.0013
Methanol[2]	lb/1000 BF	0.12	0.04	0.11
Propionaldehyde[2]	lb/1000 BF	0.0012	0.0005	0.0011

Notes:

1. Emissoin factor from EPA Region 10 memorandum regarding PM PTE EF for activities at sawmills located in PNW Indian Country, issued 5/8/2014
2. Emission factors from ODEQ - Final Summary of Kiln HAP and VOC Emission Factors revised August 2014
3. EF for particulate is the same for PM, PM_{10}, and $PM_{2.5}$

SOURCE - Propane Boiler Operating Hours: 8760 hrs
Maximum Potential Emissions (including controls) Propane Fuel Burned: 753,456 gal/yr
Maximum Design Cap 7.87 MMBtu/hr 68,941 MMBtu/yr
Propane Heating Valu 91.5 MMBtu/1000 ga (per AP-42, Chap 1.5, July 2008)

Pollutant	Category	Emission Estimate	Emission Estimate (ton/yr)	Emission Estimate (lb/hr)	Source
PM	Criteria	0.7	0.26	0.06	AP-42 Factor
PM10	Criteria	0.7	0.26	0.06	AP-42 Factor
PM2.5	Criteria	0.7	0.26	0.06	Assume = PM10
NOx	Criteria	13	4.90	1.12	AP-42 Factor
CO	Criteria	7.5	2.83	0.65	AP-42 Factor
SO2	Criteria	0.008	0.003	0.001	AP-42 Factor[1]
VOC (= TOC - CH4)	Criteria	0.8	0.30	0.07	AP-42 Factor

Note:

1. AP-42 factor is a product of EF=0.10S where S is the suflur concentration in gr/100ft^3. Sulfur concentration of 15 ppm (mass) per local commercial propane supplier.

SOURCE - Wood Waste System

Maximum Potential Emissions (including controls)

DEQ#2 - Planer Building #2, Planer #2 Shavings Cyclone

Emission Rate Potential (ERP)= (Facility Production byproduct = Shavings & Sawdust)*(Cyclone Emissions)

2791 lb PM/yr	1395 lb PM10/yr
1.4 tons PM/yr	0.70 tons PM10/yr
	0.16 lb PM10/hr

DEQ#3 - Planer Buildings #3 Seperating Cyclone

Emission Rate Potential (ERP)= 0 (routes exhaust to DEQ #4)

0 lb PM/yr	0 lb PM10/yr
0.00 tons PM/yr	0.00 tons PM10/yr
	0.00 lb PM10/hr

DEQ#4 - Planer Building #1 and Planer Building #3 Shavings Cyclone

Emission Rate Potential (ERP)= (Facility Production byproduct = Shavings)*(Cyclone Emissions)

10365 lb PM/yr	5183 lb PM10/yr
5.18 tons PM/yr	2.59 tons PM10/yr
	0.59 lb PM10/hr

DEQ#5 - Planer Building #1 Seperating/Chipper Cyclone (no emissions)

Emission Rate Potential (ERP)= 0 (routes exhaust to DEQ #3)

0 lb PM/yr	0 lb PM10/yr
0 tons PM/yr	0.0 tons PM10/yr
	0.00 lb PM10/hr

DEQ#6 - Planer Building #2 Hog Chips Cyclone

Emission Rate Potential (ERP)= (Facility Production byproduct = Planer Building # 2 Chips)*(Cyclone Emissions)

3987 lb PM/yr	1993 lb PM10/yr
2.0 tons PM/yr	1.00 tons PM10/yr
	0.23 lb PM10/hr

DEQ#7 - Planer Building #2, Planer #1 Shavings Cyclone

Emission Rate Potential (ERP)= (Facility Production byproduct = Shavings & Sawdust)*(Cyclone Emissions)

2791 lb PM/yr	1395 lb PM10/yr
1.40 tons PM/yr	0.70 tons PM10/yr
	0.16 lb PM10/hr

DEQ#12 - Sawmill Hog Chips/Shavings Cyclone

Emission Rate Potential (ERP)= (Facility Production byproduct = Sawdust + Sawmill chips)*(Cyclone Emissions)

6834 lb PM/yr	3417 lb PM10/yr
3.42 tons PM/yr	1.71 tons PM10/yr
	0.39 lb PM10/hr

Planer Building #1 and Planer Building #3 Chips Target Box

Emission Rate Potential (ERP)= (Facility Production byproduct = Planer Chips)*(Target Box Emissions)

1481 lb PM/yr	740 lb PM10/yr
0.74 tons PM/yr	0.37 tons PM10/yr
	0.08 lb PM10/hr

TOTALS:	14.1 tons PM/yr	7.1 tons PM10/yr	7.1 tons PM2.5/yr (worst-case estimate)

Wood System Parameters

Assumptions (Tier II Operating Permit 05/24/2006):

- 90 MM bd ft/period throughput
- 10% of throughput is chips (annual byproduct from sawmill)
- 11% of throughput is chips (annual byproduct from planer #1)
- 6% of throughput is chips (annual byproduct from planer #2)
- 15% of throughput is shavings (annual byproduct from planer #1)
- 8% of throughput is shavings (annual byproduct from planer #2)

Conversion Factors

- 324 Bd ft./ yd^3
- 3 lb/Bd ft (wood waste)

Emission Factors (From Oregon DEQ, AQ-EF02 and AQ-EF03, issued 6/26/2003):

- 0.5 lb PM/Ton Cyclone Emissions (Chips, Shavings, Bark, Hogged Fuel)
- 0.1 lb PM/Ton Target Box Emissions (Chips, Shavings, Bark, Hogged Fuel)

Fugitive Emissions

Note: Fugitive emissions calculations are based on Idaho DEQ Statement of Basis for Tier 2 permit (T2-020114) issued 09/05/2003

Log Sawing

Production Rate = 270,000 tons logs/year *Tri-Pro Submittal (12/05/02)

Emission Rate Potential (ERP)= (Production Rate)*(Sawing Emissions)*(1- Pneumatic Dust Pickup Control Efficiency (99%))

945 lb PM/yr — 473 lb PM10/yr
0.47 tons PM/yr — 0.24 tons PM10/yr
0.05 lb PM10/hr

Sawmill Screen

Production Rate = 35,280 tons chips/year *Tri-Pro Submittal (12/05/02)

Emission Rate Potential (ERP)= (Production Rate)*(Target Box Emissions)*(1-Building Control Efficiency (90%))

353 lb PM/yr — 176 lb PM10/yr
0.18 tons PM/yr — 0.09 tons PM10/yr
0.02 lb PM10/hr

Sawmill Chipper

Production Rate = 35,280 tons chips/year *Tri-Pro Submittal (12/05/02)

Emission Rate Potential (ERP)= (Production Rate)*(Sawing Emissions)*(1-Building Control Efficiency (90%))

1235 lb PM/yr — 617 lb PM10/yr
0.62 tons PM/yr — 0.31 tons PM10/yr
0.07 lb PM10/hr

Planer Hog

Production Rate = 10,800 tons chips/year *Tri-Pro Submittal (12/05/02)

Emission Rate Potential (ERP)= (Production Rate)*(Sawing Emissions)

3780 lb PM/yr — 1890 lb PM10/yr
1.89 tons PM/yr — 0.95 tons PM10/yr
0.22 lb PM10/hr

Planer Chipper Screen

Production Rate = 10,800 tons chips/year *Tri-Pro Submittal (12/05/02)

Emission Rate Potential (ERP)= (Production Rate)*(Target Box Emissions)*(1-Building Control Efficiency (90%))

108 lb PM/yr — 54 lb PM10/yr
0.05 tons PM/yr — 0.03 tons PM10/yr
0.01 lb PM10/hr

TOTALS: 3.2 tons PM/yr — 1.6 tons PM10/yr — 1.6 tons PM2.5/yr (worst case estimate)

Wood System Parameters

Emission Factors (From EPA Region 10 memorandum regarding PM PTE EF for activities at sawmills located in PNW Indian Country, issued 5/8/2014):

0.35 lb PM/Ton Logs (Sawing Operations)
0.2 lb PM10/Ton Logs (Sawing Operations)

Emission Factors (From Oregon DEQ, AQ-EF02 and AQ-EF03, issued 6/26/2003):

0.5 lb PM/Ton Cyclone Emissions (Chips, Shavings, Bark, Hogged Fuel)
0.1 lb PM/Ton Target Box Emissions (Chips, Shavings, Bark, Hogged Fuel)

APPENDIX B

REGULATORY REVIEW

40 CFR 63, SUBPART DDDDD **B-1**

40 CFR 63, SUBPART JJJJJJ **B-2**

40 CFR 63, Subpart DDDDD
National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

Does not apply to Tri-Pro Forest Products, Inc., Oldtown Operation.

SOURCE: 76 FR 15664, Mar. 21, 2011, unless otherwise noted.

What This Subpart Covers

§63.7480 What is the purpose of this subpart?

This subpart establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards.

Tri-Pro Forest Products operates a commercial boiler at their Oldtown Facility. However, Tri-Pro Forest Products is not a major source of HAP.

§63.7485 Am I subject to this subpart?

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in §63.7575 that is located at, or is part of, a major source of HAP, except as specified in §63.7491. For purposes of this subpart, a major source of HAP is as defined in §63.2, except that for oil and natural gas production facilities, a major source of HAP is as defined in §63.7575.

[78 FR 7162, Jan. 31, 2013]

Tri-Pro Forest Products operates a commercial boiler at their Oldtown Facility. However, Subpart DDDDD does not apply to the Tri-Pro Forest Products Oldtown Facility because this facility is not a major source of HAP as defined in §63.2.

40 CFR 63, Subpart JJJJJJ
National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

Does not apply to Tri-Pro Forest Products, Inc., Oldtown Operation.

SOURCE: 76 FR 15591, Mar. 21, 2011, unless otherwise noted.

What This Subpart Covers

§63.11193 Am I subject to this subpart?

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

Tri-Pro Forest Products may appear to be subject to Subpart JJJJJJ because Tri-Pro Forest Products operates an industrial boiler at the Oldtown Facility, which is an area source of hazardous air pollutants.

§63.11194 What is the affected source of this subpart?

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

(1) The affected source of this subpart is the collection of all existing industrial, commercial, and institutional boilers within a subcategory, as listed in §63.11200 and defined in §63.11237, located at an area source.

(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler within a subcategory, as listed in §63.11200 and as defined in §63.11237, located at an area source.

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

(c) An affected source is a new source if you commenced construction of the affected source after June 4, 2010, and the boiler meets the applicability criteria at the time you commence construction.

(d) An affected source is a reconstructed source if the boiler meets the reconstruction criteria as defined in §63.2, you commenced reconstruction after June 4, 2010, and the boiler meets the applicability criteria at the time you commence reconstruction.

(e) An existing dual-fuel fired boiler meeting the definition of gas-fired boiler, as defined in §63.11237, that meets the applicability requirements of this subpart after June 4, 2010 due to a fuel switch from gaseous fuel to solid fossil fuel, biomass, or liquid fuel is considered to be an existing source under this subpart as long as the boiler was designed to accommodate the alternate fuel.

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

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

Tri-Pro Forest Products operates an existing industrial boiler at the Oldtown Facility since before June 4, 2010, but it is a gas-fired boiler as defined in §63.11237 and is not within a subcategory listed in §63.11200.

§63.11195 Are any boilers not subject to this subpart?

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

(a) Any boiler specifically listed as, or included in the definition of, an affected source in another standard(s) under this part.

(b) Any boiler specifically listed as an affected source in another standard(s) established under section 129 of the Clean Air Act.

(c) A boiler required to have a permit under section 3005 of the Solid Waste Disposal Act or covered by subpart EEE of this part (e.g., hazardous waste boilers), unless such units do not combust hazardous waste and combust comparable fuels.

(d) A boiler that is used specifically for research and development. This exemption does not include boilers that solely or primarily provide steam (or heat) to a process or for heating at a research and development facility. This exemption does not prohibit the use of the steam (or heat) generated from the boiler during research and development, however, the boiler must be concurrently and primarily engaged in research and development for the exemption to apply.

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

(f) A hot water heater as defined in this subpart.

(g) Any boiler that is used as a control device to comply with another subpart of this part, or part 60, part 61, or part 65 of this chapter provided that at least 50 percent of the average annual heat input during any 3 consecutive calendar years to the boiler is provided by regulated gas streams that are subject to another standard.

(h) Temporary boilers as defined in this subpart.

(i) Residential boilers as defined in this subpart.

(j) Electric boilers as defined in this subpart.

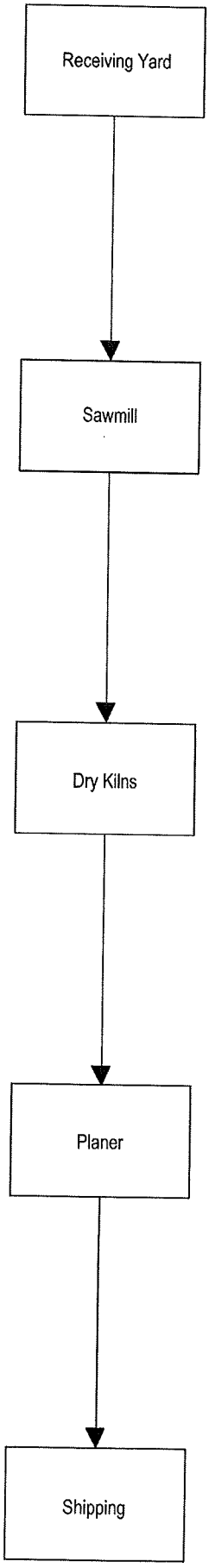
(k) An electric utility steam generating unit (EGU) covered by subpart UUUUU of this part.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

Tri-Pro Forest Products is not subject to Subpart JJJJJJ because the industrial boiler it operates at the Oldtown Facility is gas-fired as defined in this subpart.

APPENDIX C

PROCESS FLOW DIAGRAM



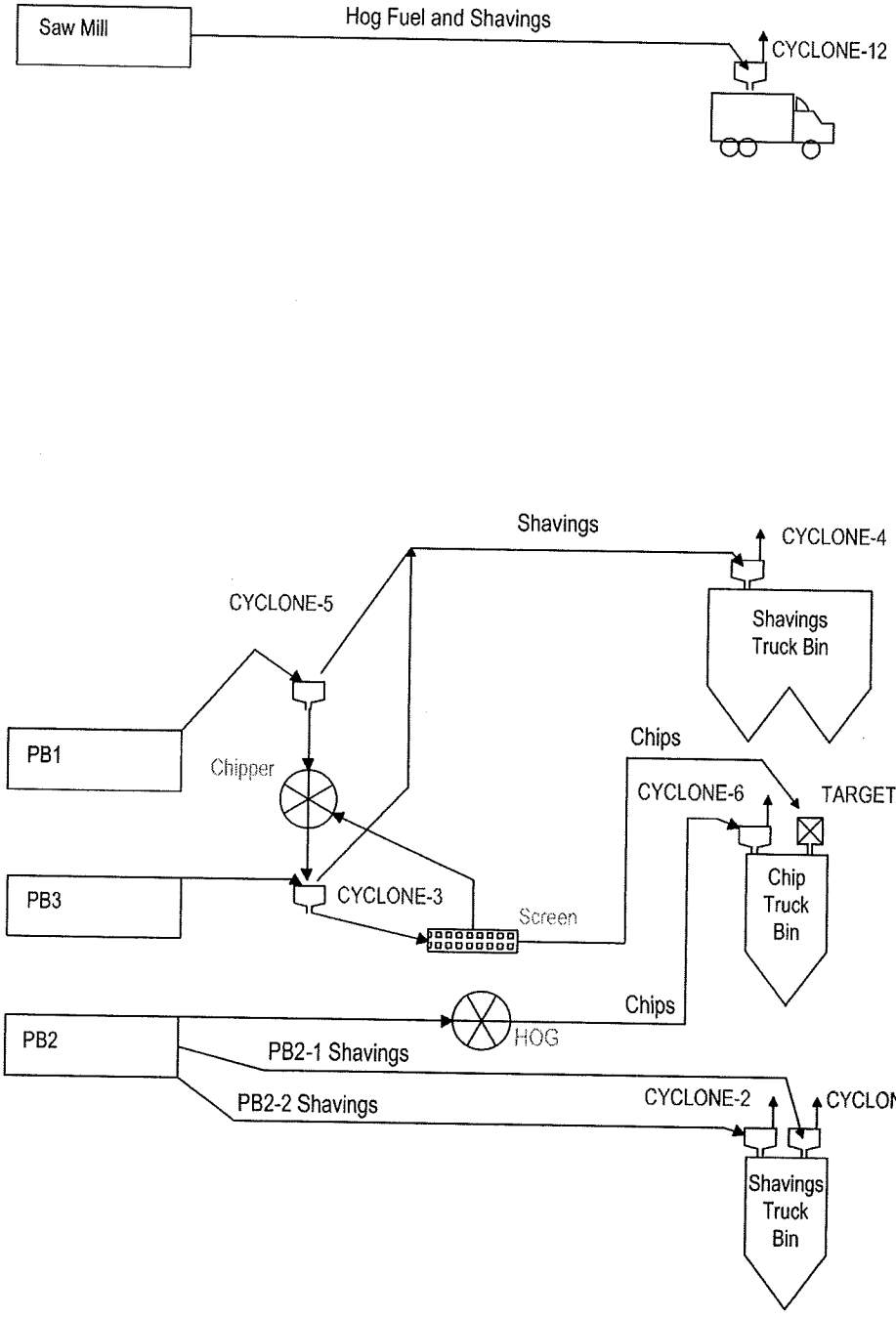


Figure 2: Process Flow Diagram

Tri-Pro Cedar Products
1122 Highway 2
Oldtown, ID 83822

Prepared by: Gabe Sedberry
Drawing Number: TPC-002
Revision Number: October 9, 2015