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State of Oregon
DEQ Department of Environmental Quality

Notice of Approval Application

Form MD901
Answer Sheet

FOR DEQ USE ONLY	
Permit Number:	Regional Office: ER - AQ Permit Coordinator
Application No:	Check Number:
Date Received:	Amount ($):
Approved (date):	Staff Initials:

1. Source Number: 18-0005-TV-01	
2. Company	**3. Facility Location**
Legal Name: Gilchrist Forest Products LLC	Name: Gilchrist Facility
Ownership type: Corporate	Plant start date: 03/28/1994
Mailing Address: P.O. Box 218	Street Address: #1 Sawmill Road
City, State, Zip Code: Hulett, WY 82720	City, County, Zip Code: Gilchrist, OR 977 Klamath
4. Number of Employees (corporate): 150	Number of Employees (plant site): 150

5. Contact Person	**6. Industrial Classification Code(s)**
Name: Mike Zojonc	SIC: 2421, 4961
Title: Plant Manager	NAICS: 321113, 221330
Phone number: (541) 815-9245	**7. Type of construction/change*:**
Fax number:	Adding ESP device to existing boiler to control PM10 emissions
Email address: mike.zojonc@gilchristfp.com	

8. Signature

Based on information and belief formed after reasonable inquiry, the statements and information in this document and any attachments are true, accurate and complete.

Mike Zojonc	Plant Manager
Name of Responsible Official	Title of Responsible Official
	June 8, 2021
Signature of Responsible Official	Date

*Note: This form requires a $720 fee (OAR 340-216-8020 Table 2) for Type 2 Construction. For a description of Construction Types 1 through 4, see OAR 340-210-0225.

Construction information

9.	Will the construction or project establish a new or relocated emissions unit or point at the facility or location? If yes include or attach a plot plan, map, or other map-related image that clearly shows at least the following: • The physical location of the site and proposed construction or change; • The height of the proposed constructed or modified source and emissions point(s) and stack exit points; • A table or scale for distance; • The location of the nearest zoned residential property; and • The location of the nearest zoned commercial property.	Yes ☐ No ☐
10.	Will the construction allow for an increase in production or capacity of the facility? If yes, by how much (include appropriate units or appropriate clarifying details; attach additional pages as necessary):	Yes ☐ No ☑
11.	Will the construction result in: • An increase or decrease any regulated pollutant emissions; or • Cause any new regulated pollutants to be emitted that were not emitted previously? If yes, use the pre and post-construction 'Emissions Data' table below for each regulated pollutant change (increase or decrease) and each new pollutant. See OAR 340-200-0020(134) for a description of regulated pollutants [For the purposes of this form, regulated air pollutant does not include Toxic Air Contaminants])	Yes ☑ No ☐
12.	Are there any requirements applicable to the new construction or modification? If yes, list them by rule citation (attach additional pages as necessary): OAR 340-218-0190 OAR 340-0210-0240	Yes ☑ No ☐

Fill out one of the following (13a or 13b) as appropriate:

13.a **New and unpermitted facilities**: Describe any existing facility or operations on site and the proposed construction. N/A ☑

13.b **Existing permitted facilities**: Describe the proposed construction or modification and describe the changes to existing processes or activities. N/A ☐

New construction to add an electrostatic precipitator (ESP) air pollution control device to existing boiler to control PM10 emissions. No changes to throughput. The addition of the ESP to the existing boilers system at Gilchrist Forest Products should not have any impact on the normal boiler operation or boiler operational parameters. There will be several ESP operational recommendations to help optimize ESP performance, such as during boiler start-ups waiting until an appropriate boiler exhaust gas temperature is established before energizing the ESP, but the ESP addition itself should not have any impact on boiler operation or performance.

14. Provide a brief description of the production process **and** attach or include a detailed process flow chart or diagram clearly showing new/existing emissions units and any changes to the process flow expected after the construction or modification: N/A ☑

15.	If the construction/project increases the size (i.e., physical footprint) of the facility/operations, a LUCS specific to the change(s) is required (unless the construction is exclusively for the installation of pollution control equipment). All new facilities or additional properties being used require an approved LUCS. If this change requires land use approval, have you attached or included an approved LUCS?	Yes ☐ No ☑ N/A ☐
16.	If the construction involves any new emission unit(s) or changes to existing emission unit(s), series DV200 and EU500 forms are required. Have you attached or included all necessary DV200 and EU500 forms?	Yes ☑ No ☐ N/A ☐
17.	If the construction includes pollution control equipment, series CD300 form(s), manufacturer information, and/or equipment specifications are required. Have you attached or included all necessary CD300 forms and relevant supplemental material?	Yes ☑ No ☐ N/A ☐
18.	Will the construction or project result in any increase or new fuels being used on site? If yes, list the types and approximate quantities expected to be used:	Yes ☐ No ☑
19.	Will the construction or project result in any new or additional refuse generation? If yes: What are the approximate types and amounts? What will be the method of disposal?	Yes ☐ No ☑
If the proposed construction or project has any association with underground storage tanks (or the associated piping), it is the applicant's responsibility to contact the UST program to determine any additional applicable requirements. UST Email: tanks.info@deq.state.or.us UST Phone: 503-229-6652 or 800-742-7878		

Timing of construction:

20.	Date on which contracts are signed, equipment is ordered, or the facility/entity has or will otherwise 'commit' to initiating construction activities	(mm/dd/yyyy) 11/04/2020
21.	Anticipated date of the beginning of physical construction (e.g. breaking ground)	06/21/2021
22.	Anticipated date of construction completion	09/15/2021

23. Include or otherwise attach any information on pollution prevention measures or cross-media impacts you want DEQ to consider in determining applicable control requirements and evaluating compliance methods.

Emissions data: Increases, Decreases, and new pollutants

Pre-and Post-Construction emissions summary data. Note that column (a) will have multiple entries for each emissions unit (one row for each pollutant). Include documentation showing how emissions were calculated.

		c. Pre-Construction Emissions		d. Post-Construction Emissions	
a. Emissions Point	b. Pollutant	Short-term (specify units)	Annual (tons/year)	Short-term (specify units)	Annual (tons/year)
B1-B2	PM	17.0 tons/month	203.9	6.7 tons/month	81.0
B1-B2	PM10	15.6 tons/month	187.2	5.0 tons/month	60.0
B1-B2	PM2.5	9.5 tons/month	114.2	4.4 tons/month	52.5
B1-B2	CO	59.7 tons/month	715.9	59.7 tons/month	715.9
B1-B2	NOx	8.1 tons/month	97.2	8.1 tons/month	97.2
B1-B2	VOC	1.2 tons/month	14.3	1.2 tons/month	14.3
B1-B2	SO2	0.4 tons/month	5.3	0.4 tons/month	5.3

Submit two copies of the completed Notice to the Regional Office listed below for the county where the source is located.

Select County: Klamath

Oregon Department of Environmental Quality

Eastern Region, Air Quality,
475 NE Bellevue Dr., Suite 110
Bend, OR 97701-7415

Facility name: Gilchrist Facility Permit Number: 18-0005-TV-01

1.	Device name and ID number or label	Wood-fired boilers, B-1 & B-2
2.	Date installation/construction commenced	1939
3.	Date installed	1939
4.	Special control requirements? [if yes, describe]	
5.	Manufacturer	Wickes
6.	Description of boiler, including type of boiler and firing method: The steam plant sources include emission units B-1 and B-2, which are sources of NOx, SO2, VOC and PM10 emissions. Emission units B-1 and B-2 are Dutch oven boilers that were manufactured by Wickes in 1939. Each of these boilers has a steam production capacity of approximately 50,000 pounds per hour (lb/hr) steam. Steam from the two boilers is measured by a single steam flow monitor. B-1 and B-2 are each equipped with a multiclone to control PM emissions and both boilers exhaust through a common stack. A multiclone is type of mechanical separator that contains an array of cyclones used to clean the boiler exhaust.	
7.	Rated design capacity (heat input, Btu/hr)	79,500,000
8.	Maximum steam production rate (lbs/hr)	50,000
9.	Maximum steam pressure (psi)	230
10.	Maximum steam temperature (°F)	520

11. Fuel usage: [for EACH fuel, enter]:

Fuel	Maximum hourly firing rate (specify units)
Hog Fuel	4.5 tons hog fuel/hr

Print Form

FORM EU501
Answer Sheet

Emissions Unit Summary

Facility name: Gilchrist Facility

Permit Number: 18-0005-TV-01

1.	Emissions Unit name and ID number or label	B-1, B-2
2.	Emissions Unit description	Wood/bark fired boilers
3.	Operating Scenario ID number	PTE

4. Emission devices, processes, and control devices:

Device/process ID(s) from DV2XX	Control Device ID(s) from CD3XX
Wood-fired boilers, B-1 & B-2	ESP

5. Pollutants/Emissions:

Pollutant	PSEL Component from ED605
PM	81.0
PM10	60.0
PM2.5	52.5

Table 6: Applicable Requirements (next page)

State of Oregon Department of Environmental Quality

Pollution Control Device Form
Electrostatic Precipitator

FORM CD301
Answer Sheet

Facility name: Gilchrist Facility Permit Number:

1.	Name				
2.	ID number or label	TBD			
3.	Date installed	2021			
4.	Manufacturer				
5	Model number	2W-091-2422			
6.	Type (wet or dry)	dry			
7.	Rated efficiency (%)	82.22			
8.	Inlet gas pre-treatment?	Multiclone dust collector on each boiler			
9.	Number of fields	2 electrical fields			
10.	Design primary voltage	480 volts			
11.	Design secondary voltage	70,000 volts			
12.	Design primary current	70 amps	94 amps		
13.	Design secondary current	800 MA	1000 MA		
14	Design inlet gas flow rate (acfm)	150,000 ACFM			

Requested annual plant site emission limits

Form ED605A

Facility: Gilchrist Facility

Operating Scenario PTE

Permit Number: 18-0005-TV-0

Emissions Detail:

Emissions Unit ID	Device/ process ID	Pollutant	Annual Production/ Process Rates		Emissions Factor			Emissions
			Rate	Units	Rate	Units	Reference	(tons/yr)
B1-B2	Wood-fired boilers	PM	750,000	lb steam/yr	0.22	lb/Mlb steam	AP-42 derived	81.0
B1-B2	Wood-fired boilers	PM10	750,000	lb steam/yr	0.16	lb/Mlb steam	Wellons Inc.	60.0
B1-B2	Wood-fired boilers	PM2.5	750,000	lb steam/yr	0.14	lb/Mlb steam	AP-42 derived	52.5
*See Attached								
for facility-wide								
PSEL summary								

Requested annual plant site emission limits

Emissions Unit Summary:

EU ID	Pollutant	Annual Emissions (tons/yr)
B1-B2	PM	81.0
B1-B2	PM10	60.0
B1-B2	PM2.5	52.5

Facility Summary:

Pollutant	Annual Emissions (tons/yr)
PM	121
PM10	81
PM2.5	65
SO2	39
NOx	104
CO	721
VOC	209
GHG	132,300

Summary of requested changes to PSELs

Pollutant	Facility-wide Current PSEL	B1 & B2 Annual Emissions, Tons Current PTE	New PTE	Difference	Facility-wide Post-Construction PSEL
*PM	243	203.9	81.0	122.9	121
**PM_{10}	208	187.2	60.0	127.2	81
***$PM_{2.5}$	126	114.2	52.5	61.7	65
SO_2	39	5.3	5.3	0	39
NO_x	104	97.2	97.2	0	104
CO	721	715.9	715.9	0	721
VOC	209	14.3	14.3	0	209

*PM calculated assuming PM_{10} is 74.1% of total PM — *AP-42 Section 1.6 9/03, Table 1.6-1, Electrostatic Precipitator*

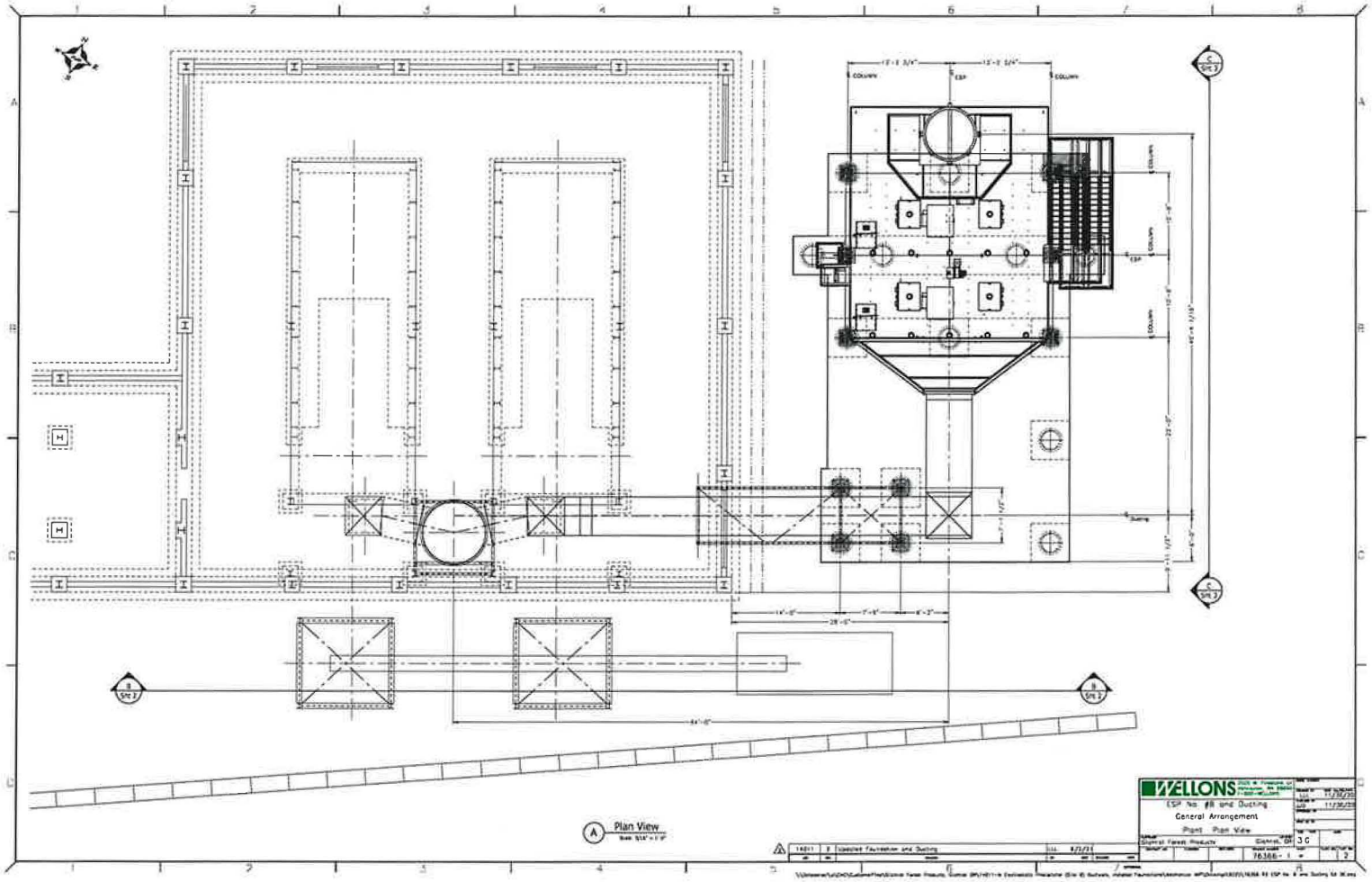
**Emission rate guarantee from manufacturer after installation of ESP — *Wellons, Inc. 2021*

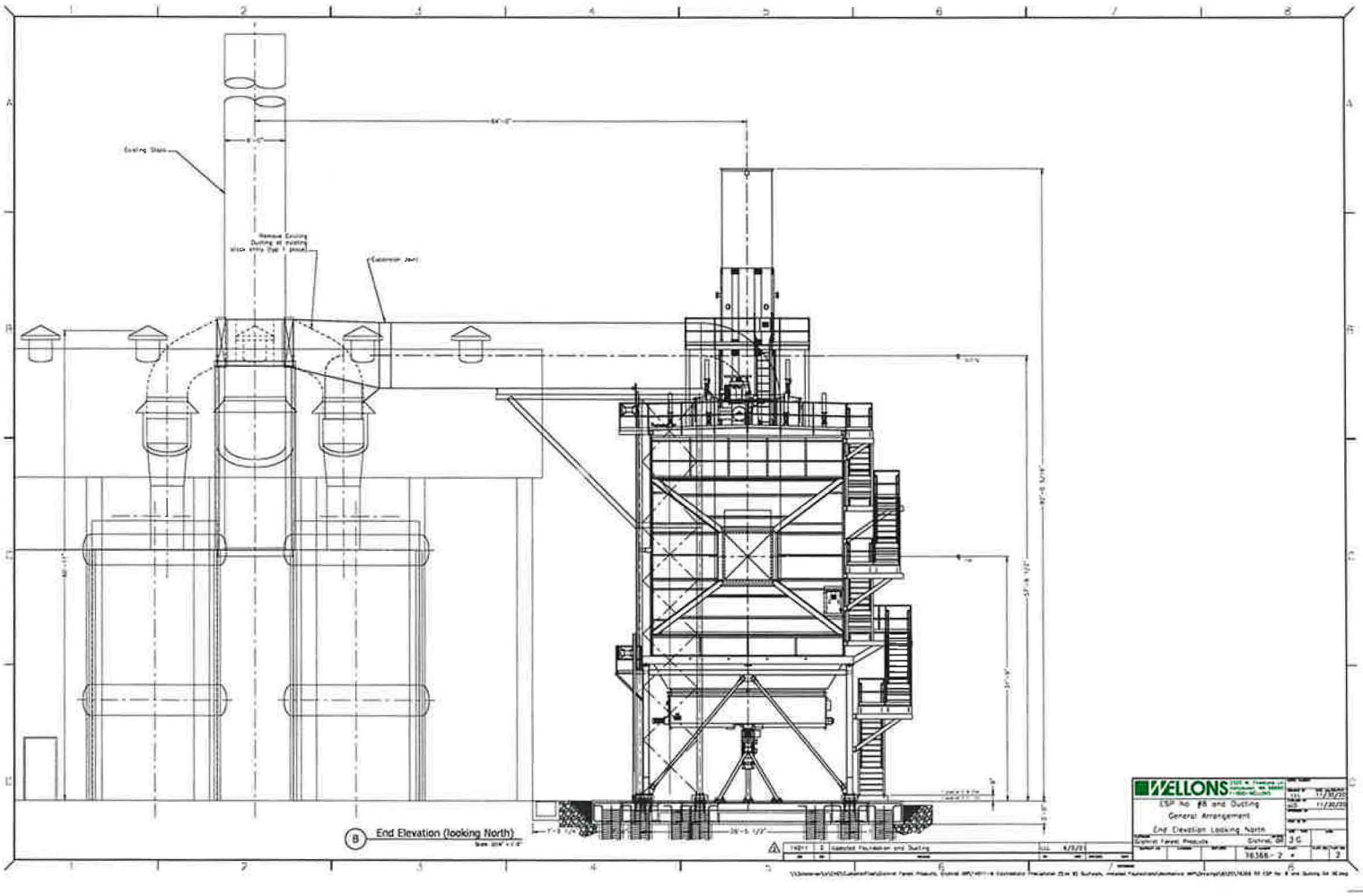
***$PM_{2.5}$ assumed to be 87.5% of PM_{10} — *AP-42 Section 1.6 9/03, Table 1.6-1, Electrostatic Precipitator*

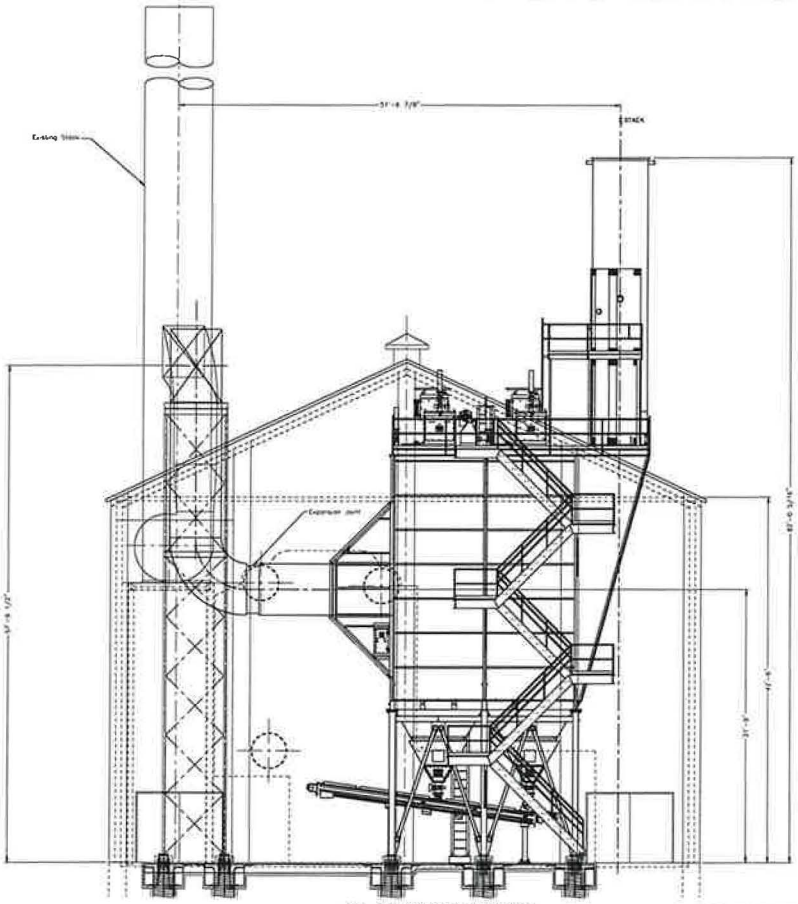
6. Applicable Requirements:

Applicable Requirement Citation	Parameter/ Pollutant	Limit/Standard/ Requirement	Currently in Compliance?	Current Monitoring Method	Proposed Monitoring Method
340-208-0110 (1)	Visible Air Contaminant Limitations	20% Opacity	Yes	PVEM	PVEM
340-208-0210(2)	Fugitive Emissions	Minimize	Yes	PVEM; REC	PVEM; REC
340-228-0210(1) (a)	Grain Loading Standards	0.2 gr/dscf @ 12% CO2	Yes	CMS; ST; O&M	CMS; ST; O&M; MMP
340-212-0200 - 340–212-0280	residual O2	6% - 13%	Yes	REC	REC
340-212-0200 - 340–212-0280	pressure drop	1" H2O - 4" H2O	Yes	REC	REC
340-220-0120, 340-220-0180	PM10, SO2, NOx, VOC	Approved EFs; production recs	Yes	REC	REC
340-222-0041	PM, SO2, NOx, VOC	PTE	Yes	REC; ST	REC; ST
340-222-0046	PM, PM2.5, PM10, SO2, NOx, CO, VOC, GHG	max production, verified EFs	Yes	REC; ST	REC; ST
340-222-0048	PM,PM10,SO2, NOx,CO,VOC	actual 1977 emissions	Yes	REC; ST	REC; ST
340-222-0048	GHG	actual 2004 emissions	Yes	REC	REC
340-222-0051	PM, SO2, NOx, CO, VOC, GHG	production data, verified EFs	Yes	REC; ST	REC; ST
340-222-0055	PM, SO2, NOx, CO, VOC, GHG	netting basis - PTE	Yes	REC; ST	REC; ST

NAD83 UTM Zone 11
June 4, 2021


Plan View
WELLONS
ESP No. #8 and Ducting
General Arrangement
Plant Plan View
Siskiyou Forest Products
Gilmore, OR
3 C
76388-1
2


Existing Stack
Remove Existing Ducting at existing stack entry (typ 1 place)
Expansion Joint
End Elevation (looking North)
WELLONS
ESP No #8 and Ducting
General Arrangement
End Elevation Looking North
Georgia Pacific Products
Dunnell, MN
16366 - 2
3 G
Updated Foundation and Ducting
4/3/21
11/30/20
11/30/20



Side Elevation (looking West)

Scale: 3/8" = 1'-0"

1	10/01	2	Updated Foundation and Ducting	6/3/21

WELLONS

ESP No. 8B and Ducting

General Arrangement

Side Elevation Looking West

Glatfelter Fiber Products

Gladfelter, PA

76366-3

3 G

2

11/30/20

11/30/20