

**Renewable Biomass Group
Potential Emission Calculations**

Table C-1. Facility Wide Emissions

Emission Sources	Emission Unit ID	Emissions (tpy)											
		CO	NO _x	Filterable PM	Total PM ₁₀	Total PM _{2.5}	SO ₂	VOC	CO _{2e}	Acetaldehyde	Formaldehyde	Methanol	Total HAP
<i>Whole Log Processing</i>													
Truck Unloading	Fugitive	--	--	3.27E-02	1.55E-02	2.34E-03	--	--	--	--	--	--	--
Whole Log Pile	Fugitive	--	--	3.27E-02	1.55E-02	2.34E-03	--	--	--	--	--	--	--
Drum Debarker	Fugitive	--	--	3.27E-02	1.55E-02	2.34E-03	--	--	--	--	--	--	--
Chipper	Fugitive	--	--	3.27E-02	1.55E-02	2.34E-03	--	--	--	--	--	--	--
<i>Green Residuals Processing</i>													
Truck Unloading	Fugitive	--	--	1.29E-02	6.12E-03	9.26E-04	--	--	--	--	--	--	--
Wood Chip Pile	Fugitive	--	--	1.29E-02	6.12E-03	9.26E-04	--	--	--	--	--	--	--
Green Chip Screening	Fugitive	--	--	1.29E-02	6.12E-03	9.26E-04	--	--	--	--	--	--	--
Green Hammermill	GHM1	--	--	1.13	1.13	1.13	--	9.11	--	0.03	0.07	0.03	0.42
<i>Drying</i>													
Dryer ¹	DR1	200.60	231.26	23.00	50.33	50.33	--	56.06	--	1.37	1.74	1.37	5.00
RTO Burners ¹					1.04	1.04	--		16,587	--	5.15E-04	--	
Tar Buildup Control	DR1	0.90	2.15	4.08E-02	0.16	0.16	1.29E-02	5.90E-03	2,592	--	8.05E-05	--	2.19E-03
<i>Dry Chips Storage</i>													
Dry Chips Storage ²	CS1	--	--	1.48E-02	6.99E-03	1.06E-03	--	29.82	--	0.25	0.50	0.48	1.23
<i>Pelletizing</i>													
Dry Hammermill Nos. 1-3	DHM1-3	--	--	10.54	10.54	10.54	--	15.39	--	0.02	0.05	0.02	0.19
Pellet Mills Nos. 1-11	PM1-11	--	--	33.79	33.79	33.79	--	6.21	--	0.01	0.02	0.01	0.25
Pellet Coolers Nos. 1-3	PC1-3	--	--				--		--				
<i>Pellet Storage and Loadout</i>													
Pellet Storage and Loadout	PS1	--	--	1.88	1.88	1.88	--	99.40	--	0.25	0.50	0.25	0.99
<i>Miscellaneous</i>													
	Includes GHM1, DHM1-3, PM1-11, PC1-3	5.77	13.74	0.26	1.04	1.04	0.08	3.78E-02	16,587	--	5.15E-04	--	1.38E-02
RCO Burners													
Diesel Fire Pump	FP1	0.50	2.33	0.17	0.17	0.17	0.15	0.19	86.54	--	6.20E-04	--	3.39E-03
Facility-Wide Total With Fugitives		207.78	249.48	70.98	100.17	100.09	0.25	216.22	35,853	1.93	2.88	2.17	8.11
Facility-Wide Total Without Fugitives³		207.78	249.48	70.81	100.09	100.08	0.25	216.22	35,853	1.93	2.88	2.17	8.11
Title V Major Source Threshold (tpy) Above Threshold³		100 Yes	100 Yes	100 No	100 Yes	100 Yes	100 No	100 Yes	N/A No	10 No	10 No	10 No	25 No
PSD Major Source Threshold (tpy) Above Threshold³		250 No	250 No	250 No	250 No	250 No	250 No	250 No	75,000 No	N/A N/A	N/A N/A	N/A N/A	N/A N/A

1. Emissions of certain pollutants for which a Manufacturer guarantee was provided are combined for the dryer and RTO combustion, as guarantee is for emissions exiting the RTO stack.

2. Potential emissions are quantified for the entire dry chip storage process at the Adel facility using the potential facility production rate of 497,000 short tons/yr for all storage silos, and not at each individual storage bin or silo.

3. Facility-wide emissions can exclude fugitives from the PSD major source determination as wood pellet production operation is not on the list of 28 categories with a lower major source threshold for criteria pollutants, which requires subject source categories to include fugitive emissions for permitting applicability determinations. Facility-wide emissions with fugitives are compared to the Title V Major Source thresholds, and facility-wide emissions without fugitives are compared to the PSD Major Source thresholds.