

**Renewable Biomass Group
Potential Emission Calculations**

Table C-13. Dryer Potential HAP Emissions

Pollutant	Wood Drying Emission Factor (lb/ODT)	Control Efficiency ¹ (%)	Potential Emissions ²	
			(lb/hr)	(tpy)
Acetaldehyde ³	1.10E-01	95%	3.12E-01	1.37E+00
Acrolein ⁴	2.30E-02	95%	6.52E-02	2.86E-01
Formaldehyde ³	1.40E-01	95%	3.97E-01	1.74E+00
HCl ³	1.90E-02	70%	3.23E-01	1.42E+00
Methanol ³	1.10E-01	95%	3.12E-01	1.37E+00
Phenol ⁴	2.80E-02	95%	7.94E-02	3.48E-01
Propionaldehyde ⁴	1.30E-02	95%	3.69E-02	1.62E-01
Total HAP⁵			1.53	5.00

1. Organic HAP emissions are controlled by an RTO, thus a 95% control efficiency has been applied to all organic HAP. A 70% removal efficiency is used for HCl as a WESP is used for PM control based on recommendations from GA EPD for a direct wood fired dryer processing green softwood at a Wood Pellet Manufacturing facility.

2. Potential emissions are calculated as follows:

Potential Emissions (tpy) = [Wood Drying EF (lb/ODT) * Dryer Capacity (ODT/yr)] * [100% - Control efficiency (%)]

Potential Emissions (lb/hr) = Potential Emissions (tpy) / Annual Operation (hr/yr) * 2,000 (lb/ton)