

Emissions factors used in Consume 4.2

Emissions Factors by Pollutant (lb/ton)		PM	PM10 ^b	PM _{2.5}	CO	CO ₂	CH ₄	NMHC
Fuel Type	Combustion							
Default	Flaming	26.7	16.8	14.7	104.7	3365	4.2	6.5
	Smoldering/Residual	39.4	27.9	25.6	292.3	2294	15.6	15.1
BROADCAST-BURNED SLASH (Ward et al. 1989)								
Douglas-fir/hemlock (n=12)	Flaming	24.7	16.6	14.9	143	3385	4.6	4.2
	Smoldering/Residual	35	27.6	26.1	463	2804	15.2	8.4
Hardwoods (n=8)	Flaming	23	14	12.2	92	3389	4.4	5.2
	Smoldering/Residual	38	25.9	23.4	366	2851	19.6	14
Ponderosa & lodgepole pine (n=3)	Flaming	18.8	11.5	10	89	3401	3	3.6
	Smoldering/Residual	48.6	36.7	34.2	285	2971	14.6	9.6
Mixed conifer (n=3)	Flaming	22	11.7	9.6	53	3458	3	3.2
	Smoldering/Residual	33.6	25.3	23.6	273	3023	17.6	13.2
Juniper (n=6)	Flaming	21.9	15.3	13.9	82	3401	3.9	5.5
	Smoldering/Residual	35.1	25.8	23.8	250	3050	20.5	15.5
BROADCAST-BURNED BRUSH (Hardy et al. 1998)								
Sagebrush (n=4)	Flaming	45	31.8	29.1	155	3197	7.4	6.8
	Smoldering/Residual	45.3	29.6	26.4	212	3118	12.4	14.5
Chaparral (n=9)	Flaming	31.6	16.5	13.5	119	3326	3.4	17.2
	Smoldering/Residual	40	24.7	21.6	197	3144	9	30.6
NEW EMISSIONS FACTORS (Baker 2010)								
Minnesota Grass (n=16, n=7) ^c	Flaming	20	20	10.8	61.4	3396	2.1	3.8
	Smoldering/Residual	20	20	10.8	109.4	3260	4.3	4.3

^a Fire-average values are weighed-averages based on measured carbon flux.

^b PM10 values are calculated, not measured, and are derived from known size-class distributions of particulates using PM and PM2.5.

^c Flaming and smoldering sample sizes, respectively