

COURSE: Prescribed Fire Planning and Implementation

TOPIC: Smoke Management (Unit 5B)

LESSON B: Quantifying and Achieving Smoke Management Objectives

HANDOUT 1: AP-42 TABLE (EPA*)

Calculated average emission factors by region for the United States. It is recommended that these emission factors only be used for very general planning purposes and that localized emission factors be developed where fuel and burning conditions differ significantly from the regional average.

Region of the United States ^a	Fuel type ^b	percent fuel ^c	Emission factors (g/kg) ^d			
			PM2.5	PM10	PM	CO
PACIFIC NORTHWEST						
	Logging Slash					
	Piled slash	42	4	5	6	37
	DF-WH	24	12	13	17	175
	Mixed Conifer	19	12	13	17	175
	PP	6	13	13	20	126
	Hardwood	4	11	12	18	112
	Underburning pine	5	30	30	35	163
	Average EF for region	100	9.4	10.3	13.3	111.1
PACIFIC SOUTHWEST						
	Chaparral	20	8	9	15	62
	Sagebrush	35		9	15	62
	Underburning pine	15		30	35	163
	Pinion/Juniper	20		13	17	175
	Grassland	10		10	10	75
	Average EF for region	100		13.0	17.8	101.0
SOUTHEAST						
	Palmetto-gallber	35		15	16	125
	Underburning pine	30		30	35	163
	Grassland	10		10	10	75
	Logging slash	20		13	20	126
	Other	5		17	17	175
	Average EF for region	100		18.8	21.9	134.0
ROCKY MOUNTAINS						
	Underburning pine	20		30	35	163
	Grassland	20		10	10	75
	Logging slash	50		4	6	37
	Other	10		17	17	175
	Average EF for region	100		11.9	13.7	83.4
NORTH CENTRAL AND EASTERN						
	Underburning pine	10		30	35	163
	Grassland	30		10	10	75
	Logging slash	50		13	17	175
	Other	10		17	17	175
	Average EF for region	100		14.0	16.5	143.8

* These values are more conservative than those found in NWCG Smoke Management Guide.