

## House Energy and Environment Committee

High density fuel buildup and high- intensity fire particulate emission (PM) figures from :  
Pyne, Stephen J., Patricia L. Andrews, and Richard D. Laven, Introduction to Wildland Fire  
(1996). New York: Wiley

Battye, William, and Rebecca Battye of EC/R Incorporated. 2002. Development of Emissions  
Inventory Methods for Wildland Fire Final Report, February 2002, Prepared for U.S.  
Environmental Protection Agency, EPA Contract No. 68-D-98-046, Work assignment No. 5-03  
<http://www.epa.gov/ttn/chief/ap42/ch13/related/firerept.pdf>

80% of (PM) "particulate matter" is one micron or less and more than 90% of wood smoke  
particulate can enter the human lung up to 10 micron. (U.S. EPA)

25 to 40 pounds of (PM) is produced per ton of wood fuel burnt. Using 20 pound average of  
(PM)/ton of fuel, the Biscuit Fire of 2002 of 500,000 acres, with 20 ton of fuel per acre  
consumed produced 3,000,000 pounds of (PM).

In 2007 wildfires scorched hundreds of thousands of acres in Oregon, producing an estimated 4.5  
million pounds of (PM). EPA states, forest fires nationally 2000-2005 unleashed 562 million  
tons of carbon.

In addition in 2007 greenhouse gas (GHG) emissions, principally CO<sub>2</sub>, from forest fires in  
Oregon resulted in emissions of 56 teragram. One teragram equals 1.1023 million tons (US).  
Emissions from Oregon forest fires in 2007 were equivalent to GHG emissions from 11.1 million  
cars driven all year, and constituted as much or more than all human-caused emissions in the  
State combined.

Among other emissions from forest fires are carbon monoxide, sulfur dioxide, nitrogen dioxide,  
ammonium, volatile organic compounds, formaldehyde, methanol, and air-borne lead and  
mercury. The Environmental Protection Agency states after years of study exposure to these PMs  
and compounds listed above can cause extreme health problems.

Representative's, the point I'm getting at is uncontrolled forest fires are responsible for a major  
source of Oregon's air pollution. By reducing forest fires we could save lives, save \$ millions in  
medical and firefighting costs plus create 1000's of jobs working in our forests.

Thank you,  
Bill J. Kluting  
Carpenters Industrial Council