



The table below compares the rate of emissions generated by subscribed forest fires of 750,000 acres and the rate of emission generated by the New Foundland Offshore Burn Experiment (NOBE). Most of the information in this table was generated by Dr. Ron Ferek, from the University of Washington. He assumed an oil burning rate of 200 bbl/hr.

The comparison between NOBE and forest fires is based on emission rate, not total quantities. For example, CO₂ emission rate from burning 750,000 acres of forest would be 350,000 times greater than burning 200 barrels of oil. This does not give us precise idea as to total quantities, but provides a way to compare the burns.

The assumption is that slash burn emission rates from forest fires are similar to these of slash burn.

Emission Rate Comparison Between NOBE and Burning 750,000 Acres of Forest

Substance	Average Emission Factor for NOBE (g/kg fuel burned)	Emission Rate (kg/hr)	Comparable Emissions from Other Known Factors	Emission Rate Comparison of NOBE to 750,000 Acres Forest Fire ¹
CO ₂	2,800	75,600	~ 2 acre slash burn	1: 375,000
CO	17.5	470	~ 0.1 acre slash burn	1: 7,500,000
Total smoke particle	150	4,050	~ 9 acres slash burn	1: 83,300
Sub-3.5 µm smoke particle	113	3,050	~ 9 acres slash burn	1: 83,300
Sub-3.5 µm soot	55	1,480	~ 38 acres slash burn	1: 19,700
PAHs	0.04	1.1	~ 7 acres slash burn	1: 107,100

1. The numbers are rounded to the nearest 100.