Computer Models
For
Fire and Smoke

Model Name:	Fire Emissions Production Simulator
Version:	1.0
Date:	2-13-2014
Model Actively Supported?:	No
Classification:	
Very Short Description:	The Fire Emissions Production Simulator (FEPS) calculates hourly fuel consumption, heat release and emissions for wildland fires along with plume rise and buoyancy.
Modeler(s), Organization(s):	Roger D. Ottmar, U.S. Forest Service, Pacific Northwest Research Station, Fire and Environmental Research Applications Team
User's Guide:	www.fs.fed.us/pnw/fera/feps/FEPS_users_guide.pdf
Technical References:	None
Validation References:	None
Availability:	www.fs.fed.us/pnw/fera/feps/#download
Price:	Free
Necessary Hardware:	Windows XP or lower
Computer Language:	C ++
Size:	12.9 MB
Contact Information:	None
Detailed Description:	FEPS distributes total fuel consumption and emissions over the life of a wildland fire event to generate hourly emission

and heat release information. Inputs include fuel moisture of various fuel strata, hourly weather, and a number of other factors. The program allows users to produce reasonable results with very little information by providing default values and calculations, and advanced users can customize the data they provide to produce very refined results. This procedure allows a user with less specific knowledge of a fire to accept the data in a system default as a starting point and get reasonable results, and also allows users with more specific knowledge of a fire to completely customize the data used to compute emissions.