

Appendix C1

Technical support document for the development of MOVES2014a nonroad mobile (except marine, airport, and railroad) emissions inventories for 2014, 2025, and 2030

Attainment Year 2014 and Projection Years 2025 & 2030 Inventories

Emissions inventories for the nonroad sources for 2014, 2025 and 2030 were created using EPA's MOVES2014a model (ver. 20151201) except for locomotives, marine diesel vessels, and aircrafts.

Model runs were made for the metropolitan Washington region for July/Weekday for all three milestone years, which represented an average ozone season weekday.

Methodology to prepare inputs for the ozone season weekday runs is provided below.

Meteorology

Meteorology data was acquired from the National Climatic Data Center (NCDC). Hourly average temperature and dew point temperature data were collected from the Dulles airport (IAD) weather station for July 2014. Hourly relative humidity data was calculated using these two parameters. This data was also used for the 2025 and 2030 runs.

Fuel Parameters

Fuel parameters were supplied by the District of Columbia, Virginia, and Maryland. The District of Columbia decided to use the model default values for fuel parameters. Maryland and Virginia supplied local data for the three milestone years.

The same meteorology and fuel parameters were also used to develop on-road mobile emissions for 2014, 2025, and 2030 using MOVES2014a on-road model. The MOVES2014a nonroad input, output, and runspec files are being provided in Appendix C2.