

Appendix B1

Technical support document for the development of quasi-point, area, and marine diesel vessels, airport, and railroad source (non-road model, MOVES2014a sources) emissions inventories for 2014, 2025, and 2030

Attainment Year 2014 Inventories

Methodologies for developing the attainment year 2014 emissions inventories for the quasi-point, area, and marine, airport, and railroad sources for the District of Columbia, Maryland, and Virginia are described in detail in Appendices B1a, B1b, and B1c respectively. Emissions inventories are contained in Appendix B2.

Projection Years 2025 & 2030 Inventories

The 2025 and 2030 projected inventories were derived by applying the appropriate growth factors to the 2014 attainment year emissions inventory. EPA guidance describes four typical indicators of growth. In order of priority, these are product output, value added, earnings, and employment. Surrogate indicators of activity, for example population growth, are also acceptable methods.

Emissions from the quasi-point sources at the Andrews Air Force Base in Maryland were projected to be the same as the 2014 attainment year.

Round 9.0 Cooperative Forecasts (population, household and employment projections) and Vehicle Miles Traveled (VMT) and lane mile projections for 2025 and 2030 were used to project area and marine, airport, and railroad sources emissions. Round 9.0 Cooperative Forecasts were prepared by the Metropolitan Washington Council of Governments (MWCOG) staff and officially adopted by its Board of Directors on September 9, 2016. VMT and lane mile projections were developed by the National Capital Region Transportation Planning Board (TPB) staff as part of the on-road mobile emission analysis for the 2008 ozone redesignation request and maintenance plan and the 2016 Constrained Long-Range Plan and 2017-2022 Transportation Improvement Program (TIP).

The 2025 and 2030 emissions were calculated by multiplying the 2014 attainment year emissions by the above growth factors for 2025 and 2030 for each jurisdiction. Each area and marine, airport, and railroad source category was matched to an appropriate growth surrogate based on the activity used to generate the attainment year 2014 emissions estimates. Surrogates are listed in the Appendix B2.

The projected emissions inventories are contained in Appendix B2 along with the growth factors for population, household, employment, VMT, and lane miles.