December 4, 2024

MEMORANDUM

SUBJECT: Refresh of the 64-bit Compilation of the AERMOD Dispersion Model Component of the AERMOD Modeling System

FROM: Clint Tillerson, Model Development Team Lead
Air Quality Modeling Group
Air Quality Assessment Division, Office of Air Quality Planning and Standards

TO: AERMOD Modeling System Stakeholder Community

The AERMOD model development team has posted a refreshed compilation of the 64-bit executable for version 24142 of the AERMOD dispersion model component (aermod.exe) of the AERMOD Modeling System to EPA's Support Center for Regulatory Atmospheric Modeling (SCRAM) website. In addition, a new zipped file of the test cases using the new executable have also been posted. Please download the new 64-bit executable from SCRAM as a replacement for the executable originally posted on 11/20/2024. Links to the executable and test cases are provided below.

Link to recompiled 64-bit aermod.exe posted on the SCRAM website on 12/4/2024: https://gaftp.epa.gov/Air/aqmg/SCRAM/models/preferred/aermod/aermod_exe.zip.

Link to test cases: https://gaftp.epa.gov/Air/aqmg/SCRAM/models/preferred/aermod/aermod_test_cases.zip.

Please note that the AERMOD source code has not changed, thus the version number 24142 has been retained with this recompilation of the 64-bit executable. The 32-bit executable has not been recompiled.

Since the release of AERMOD version 24142, it has come to our attention that there could be minor differences, in some cases, in modeled concentrations generated using the 64-bit executable compared to concentrations generated using the 32-bit executable posted on the SCRAM website on 11/20/2024. These differences are the result of differences in the compilation of the 32-bit and 64-bit executables as Intel transitions away from support of 32-bit compilations in more recent versions of the Fortran compiler. Please note, given this transition, EPA will no longer provide 32-bit executables of the AERMOD Modeling System beginning with the next release of the AERMOD Modeling System anticipated in 2025.

Please contact Clint Tillerson at tillerson.clint@epa.gov with questions.