Model Change Bulletin (MCB) 18
AERMOD version 24142 (May 21, 2024)

Changes are listed by type and with each change are the affected pollutants and source types:

Bug Fixes

Item	Modification	Pollutants	Source Types
1	Corrected a bug in subroutine PLUME_CONCENTRATION that was causing mixing height to be potentially reset each time the subroutine was called.	ALL	RLINE, RLINEXT
2	Corrected 2-digit year conversion for year 2000 when meteorological data crosses from 1999 to 2000.	ALL	ALL
3	Corrected bug in which EMISUNIT keyword was not working with the BUOYLINE source type. EMISUNIT keyword was ignored.	ALL	BUOYLINE
4	GRSM PLUMESIZES and DoGRSMChem code modified to prevent not-a-number (NaNs) concentration values for ground releases from volume, area, and openpit source types.	NO2	ALL

Enhancements

Item	Modification	Pollutants	Source Types
1	Updated the warning message for 24-hour average to state the date and time information when less than 18 hours of data are used in the average.	ALL	ALL
2	Add warning messages for 3- and 8-hour averages. Warning issued if less than 6 hours used to compute 8-hour average or less than 3 hours used to compute 3-hour average.	ALL	ALL

Formulation updates – Regulatory

Item	Modification	Pollutants	Source Types
1	Remove BETA flag restriction for RLINE source type. RLINE promulgated as a regulatory option in 2024 update to the *Guideline* (40 CFR Part51, Appendix W).	ALL	RLINE
2	Remove BETA flag restriction for GRSM NO2 conversion option. GRSM promulgated as a regulatory option in 2024 update to the *Guideline* (40 CFR Part51, Appendix W).	ALL	ALL
3	Remove BETA flag restriction for COARE processing of overwater meteorology in AERMET. COARE in AERMET promulgated as a regulatory option in 2024 update to the *Guideline* (40 CFR Part51, Appendix W).	ALL	ALL

Formulation updates – BETA

None

Formulation updates – ALPHA

None