Model Change Bulletin (MCB) 12 - AERMOD version 16216 changes by change type.

Listed with each change are the affected pollutants and source types:

BUG FIXES

Item	Modification	Pollutants	Source Types
1	Modified subroutine HRLOOP to use .LE. instead of .LT. in comparing FULLDATE vs. IEDATE.	All	All
2	Modified subroutine ALLSETUP to increment the array dimensions associated with AREA source types by 1 to accommodate more complex AREAPOLY sources.	All	AREA
3	Modified subroutine PRESET to account for name changes in the beta low wind options.	All	All
4	Modified subroutine SBLRIS to avoid potential runtime errors in calculating plume rise under stable conditions if (TERMB*TERMC+1-TERMD) .LE. 0.0	All	POINT
5	Modified subroutine SETSRC to initialize SURFAC = .T. for sources with release heights less than 0.1 times the mixing height (ZI).	All	POINT
6	Modified subroutine CENTROID to set SURFAC = .F. for sources with release heights greater than or equal to the mixing height (ZI).	All	POINT
7	Added code to define a receptor exclusion zone in which receptors within the maximum extents of a buoyant line source are omitted from calculations	All	BUOYLINE
8	An individual line in a buoyant line source can be included in a SRCGROUP	All	All
9	The hourly emissions file for a buoyant line source now requires a buoyancy flux parameter for each line of a buoyant line source	All	All
10	Included buoyant line sources in event processing	All	BUOYLINE

ENHANCEMENTS

Item	Modification	Pollutants	Source Types
1	Subroutine PRESET was modified to account for BLP options.	All	All
2	Replaced the previous PVMRM option with the PVMRM2 option, retaining PVMRM as the option name.	NO2	All
3	Removed the requirement for specifying the BETA option for application of the PVMRM, OLM, and ARM2 options for NO2.	NO2	All
4	Modified subroutine SOLOCA to remove the BETA/Non-default status of POINTCAP and/or POINTHOR sources.	All	POINTCAP & POINTHOR
5	Modified subroutine MEOPEN to remove BETA/Non-default status of MMIF meteorological data	All	All
6	Modified subroutines MEOPEN and PFLCNV to identify whether measured turbulence parameters (i.e., Sigma-Theta	All	All

	and/or Sigma-W) are included in the PROFFILE input file. This information is used to determine whether an application utilizing the ADJ_U* option in AERMET is considered to be "regulatory" or non-DFAULT.		

MISCELLANEOUS

Item	Modification	Pollutants	Source Types
1	The format of the MODOPS array included in the header records of AERMOD output files has been slightly modified.	All	All