

EMS-HAP Version 3.0 (Emissions Modeling System for Hazardous Air Pollutants Version 3.0):

EMS-HAP is written in the SAS[®] programming language and is designed to run on any UNIX[®] workstation in which SAS[®] has been installed. You will need a SAS[®] license and some knowledge of SAS[®] to use this program.

EMS-HAP Version 3.0 is an emission processor that performs the steps needed to process an emission inventory containing toxic air pollutants, such as the 1999 NEI for HAPs, for input into either the Assessment System for Population Exposure Nationwide (ASPEN) dispersion model or the Industrial Source Complex Short Term Version 3 (ISCST3) dispersion model.

These steps include:

- spatial allocation of emissions reported at the county-level (e.g., mobile and non-point source emissions) to the census tract level or the grid cell level depending on model selection (three choices: ASPEN, ISCST3 using a grid cell approach, ISCST3 using a tract-level approach);
- temporal allocation of annual emission rates to annually averaged (i.e., same rate for every day of the year) 3-hour emission rates to account for diurnal patterns of emissions when processing for ASPEN, and to seasonal and day-type specific hourly emission rates to account for diurnal, day-of-week and seasonal patterns in emissions when processing for ISCST3;
- optional projection of stationary source emissions to future years accounting for emissions growth and/or reductions resulting from emission reduction scenarios such as the Maximum Achievable Control Technology (MACT) standards.

Note that if you are running EMS-HAP to process emissions for ISCST3, you will need to define a domain. You can use the ASPEN-based spatial surrogates supplied with EMS-HAP Version 3.0, (which allocate emissions to the tract level) so that you will not have to develop your own spatial allocation factor files. If you choose to allocate emissions to grid cells, you will have to develop gridded surrogates specific to your domain and grid cell specifications. This will require the use of a geographic information system.