

## 2008 EPA Datasets for Point Sources and Chromium Speciation

The selection of emissions data for the Point sources data category generally uses any State, Local, or Tribal (S/L/T) air agency reported values (i.e., the Responsible Agency dataset) preferentially. USEPA performed checks for unreasonably high emission value outliers at both the individual process level (as part of the 2008 NEI version 1 review) and at the facility aggregate level (as part of the version 1.5 review). S/L/Ts were contacted about the most questionable values, and had access to all of the EPA flagged overwrite values from the NEI version 1 release, and were given opportunity to submit revised values or confirm that the original values were valid. The EIS Process Identifiers for S/L/T emissions values that remain suspect and have neither been revised nor confirmed by the responsible S/L/Ts were used to build a dataset of zero values called "EPA Overwrite Point v1.5". This dataset was placed first in the Point selection hierarchy such that the zero values would be selected rather than the remaining suspect S/L/T values. For version 1.5, this EPA dataset contains 1081 emissions values (of zero) which prevent the Responsible Agency values from being selected. 1063 of those 1081 values are for one pollutant (208968 =Acenaphthylene ) for one aircraft SCC (2275050012). The outlier values reported by S/L/T responsible Agencies were due to a known error in an EPA emission factor model.

There were two other EPA datasets that were selected ahead of the S/L/T RAS dataset for point sources. The first of these is the "EPA Cr Split v1.5" dataset. This dataset uses any reported S/L/T reported values for three pollutant codes (total chromium, chromium VI and chromium III) to build a dataset that fills in any gaps where the S/L/T did not provide all three, or where some overlapping combinations were reported by the S/L/T. Note that the same "EPA Cr Split v1.5" dataset is also used in the NonPoint selection hierarchy to perform the same chromium speciation and reconciliation (where needed) functions.

[Chromium fix overlaps and speciate](#)

[Chromium speciation factors](#)

EPA also built a dataset to handle gap-filling and reconciliation (where needed) for the five related Particulate Matter pollutants. The five pollutants are PM10-FIL, PM2.5-FIL, PM-CON, and PM10-PRI and PM2.5-PRI, which are sums from the first three. The "PM Augmentation v1.5" dataset was built using any S/L/T-reported values for any of the five pollutants. The dataset primarily contains any of the five pollutants that were not reported by the S/L/T. These missing pollutants were determined from simple math performed on the reported pollutants (adding FIL and CON to get a PRI value, or subtracting CON from PRI to get a FIL value) and also by applying ratios of size fractions and CON to FIL portions to estimate missing pollutants. In some cases the S/L/T-reported values were internally inconsistent (PM10-FIL less than PM2.5-FIL), and in those instances the PM Augmentation v1.5 dataset contains values that will be selected ahead of the S/L/T data.

Emission values from the S/L/T "Responsible Agency Data Set" were next selected and included in the 2008 NEI v1.5 GPR wherever they had been reported, unless the specific EIS Process ID and pollutant code had appeared in and already been selected from the EPA Overwrites, Chromium, or PM Augmentation datasets above.

EPA developed and used for gap-filling a set of emissions for Electric Generating Units, based upon a set of emissions factors and unit-specific heat input values as reported to the EPA's Clean Air Market Division's Acid Rain database. The unit-specific estimates were matched to EIS Process IDs that appeared to be being used for reporting to the EIS by the S/L/T air agencies as of March 2011 and were loaded to EIS as the "EPA EGU v1.5" dataset. The estimation procedures are [provided here](#).

[Documentation for the "EPAAirports1109" data set.](#)

[Documentation for the "EPA TRI Augmentation v1.5" data set.](#)

The last dataset used in the selection hierarchy for Point sources for the 2008 NEI v1.5 GPR was "EPA HAP Augmentation v1.5".

[HAP Augmentation Procedures Document](#)

[HAP-to CAP ratios used in the procedures](#)