**NEI 2008 v3 Hg- changes to mercury emissions from Version 2 to Version 3**

**OVERALL: The total national mercury emissions in the 2008 NEI (61 tons) is unchanged between version 2 and 3**

**Category Changes to Hg emissions in NEI 2008v3:**

- **Utilities:** Version 3 removes estimated emissions from a coal fired power plant in Arizona that was still under construction in 2008. This resulted in a decrease of 0.1 tons from the utility coal fired boiler category.
- **Boilers:** In Version 2, we included a gap-fill estimate of 0.5 tons of mercury emissions from boilers and process heaters that we estimated were missing from the NEI. For version 3, we computed and added the missing emissions to the NEI by using both Boiler MACT rule data and an emission factor approach. The emission factor approach for v3 used a more accurate emission factor than in v2, and the net impact of including the missing emissions in the v3 NEI was a 0.3 ton reduction for the Industrial/Commercial/Institutional Boilers and Process Heaters category.
- **Resolves conflicting information from states:** In some instances, states submitted 2008 emissions data for certain processes that they had also identified as not operating in 2008. Therefore, NEI 2008v2 did not include emissions from those processes. After the 2008v2 release, states indicated that these processes were in fact operating, and these emissions are now reflected in the 2008v3 release. This also impacted emissions from pollutants other than mercury.
- **New information from Minnesota:** Minnesota submitted updated to 2008 emissions information for 2 facilities: an electric arc furnace and a sewage sludge treatment plant.

Below Table 1 shows the impacts of the changes in 2008v3 NEI on the mercury summary used throughout the Agency, and Table 2 shows the resultant trends comparison using the 2008v3 NEI is shown in the table below.

**Table 1 - Comparison of v2 and v3 Mercury**

| Source Category | 2008 Emissions (tpy) 2008 NEI v2[1] | 2008 Emissions (tpy) 2008 NEI v3 | V3 Reason for difference |
|---|---|---|---|
| Utility Coal Boilers | 29.5 | 29.4 | V3 removes Hg from TUCSON ELECTRIC POWER CO – SPRINGERVILLE because this facility was still under construction in 2008. |
| Hospital/Medical/ Infectious Waste I**n**cineration | 0.1 | 0.1 | |
| Municipal Waste Combustors | 1.3 | 1.3 | |
| Industrial/Commercial/ Institutional Boilers and Process Heaters | 4.5 [1] | 4.2 | After we published version 2, we determined that the gap-fill estimate for mercury from certain coal-fired boilers was too high. Version 3 uses a better emission factor, lowering the estimate. |
| Mercury Cell Chlor-Alkali Plants | 1.3 | 1.3 | |
| Electric Arc Furnaces | 4.7 | 4.8 | Minnesota updated estimates for an EAF facility in St. Paul (Gerdau Ameristeel US Inc - St Paul Mill) based on 2008-specific test data. The previous value used 2010-specific test data from the Information Collection Request for the EAF rule. |
| Commercial/Industrial Sold Waste Incineration | 0.02 | 0.02 | |
| Hazardous Waste Incineration | 1.3 | 1.3 | |
| Portland Cement Non-Hazardous Waste | 4.2 | 4.2 | |
| Gold Mining | 1.7 | 1.7 | |
| Sewage Sludge Incineration | 0.45 | 0.3 | Minnesota corrected the 2008 Hg that was originally submitted for several processes at the Metropolitan Wastewater Treatment Plant in Ramsey, Mn |
| Mobile Sources | 1.7 | 1.8 | No change: v2 should also have been 1.8, the table entry was previously mistyped. |
| Other Categories | 10.3 | 10.7 | Added missing emissions from processes mislabeled as “not operating” in v2. |
| **Total (all categories)** | **61** | 61 | Total has not changed |
| 1 –the 2008 NEI v2 raw data sums to just 4.0 tons, but we have listed the additional known 0.5 tons that should have been included. | | | |

**Table 2 -- MERCURY SUMMARY: 2008 NEI version 3 compared to 1990 and 2005 NEI.**

| Source Category | 1990 Emissions (tpy) Baseline NEI for HAPs, 11/14/2005 | 2005 Emissions (tpy) 2005 MATS proposal 3/15/2011 | 2008 Emissions (tpy) 2008 NEI v3 2/XX/2013 |
|---|---|---|---|
| Utility Coal Boilers | 58.8 | 52.2 | 29.4 |
| Hospital/Medical/ Infectious Waste Incineration | 51 | 0.2 | 0.1 |
| Municipal Waste Combustors | 57.2 | 2.3 | 1.3 |
| Industrial/Commercial/ Institutional Boilers and Process Heaters | 14.4 | 6.4 | 4.2 |
| Mercury Cell Chlor-Alkali Plants | 10 | 3.1 | 1.3 |
| Electric Arc Furnaces | 7.5 | 7.0 | 4.8 |
| Commercial/Industrial Sold Waste Incineration | Not available | 1.1 | 0.02 |
| Hazardous Waste Incineration | 6.6 | 3.2 | 1.3 |
| Portland Cement Non-Hazardous Waste | 5.0 | 7.5 | 4.2 |
| Gold Mining | 4.4 | 2.5 | 1.7 |
| Sewage Sludge Incineration | 2 | 0.3 | 0.3 |
| Mobile Sources | Not available | 1.2 | 1.8 |
| Other Categories | 29.5 | 18 | 10.7 |
| **Total (all categories)** | **246** | **105** | **61** |