

Emissions Inventory and Analysis Group
Office of Air Quality Planning and Standards
Status Update

NACAA Emissions and Modeling Subcommittee

October 17th, 2022

2020 NEI Status and Upcoming Dates

- 2020 risk-based point source review through October 25, 2022 (in support of AirToxScreen).
 - Draft 2020 point sources released in the Emissions Inventory System
- 2020 point source release previously planned for October 15, 2020 has been delayed pending ongoing point source review. New date has not been set.
- Tentative public release of wildfire and prescribed fire emissions planned for January, 2023.
- 2020 NEI release planned for end of March 31, 2023.

Air Emissions Reporting Rule

- Small Business Advocacy Review (SBAR) Panel was convened on 10/6/2022.
- SBAR Panel process is 60 days and panel meeting convened no earlier than 2 weeks after convene date. See also:
<https://www.epa.gov/reg-flex/small-business-advocacy-review-sbar-panels>
- AERR shows on EPA regulatory agenda as a Spring 2023 proposal.

SPECIATE 5.2 release

- **SPECIATE is the EPA's repository of organic gas and particulate matter speciation profiles. These emission source profiles can be used to:**
 - Create speciated emissions inventories for photochemical air quality modeling,
 - Estimate hazardous air pollutant (HAP) emissions,
 - Provide input to the Chemical Mass Balance (CMB) receptor models.
- **SPECIATE v5.2 was released September 2022.**



Key SPECIATE 5.2 updates

- New speciation profiles
 - 18 TOG and 1 PM profile for biomass burning; updates all wildland fire TOG emission speciation
 - Current wildland fire TOG emissions are ~35% “unknown” → leads to largest VOC component in modeling
 - 15 TOG and 24 PM profiles; completely updates mobile speciation (speciation no longer in MOVES)
 - 23 TOG profiles for consumer and commercial nonpoint solvents
 - 1 new TOG agricultural pesticides based on CARB data
 - 1 new TOG profile for agricultural silage
 - 8 asphalt TOG profiles, spanning hot-mix, warm-mix, roofing asphalt, sealants, etc.
- PM-AE6, PM-AE8, and PM-CR1 profile types now available in SPECIATE, including new semi-volatile species needed for some chemical mechanisms for air quality models
- Species properties added for more transparent and automated mapping to mechanisms
- Revised and expanded “Guide for Data Developers”

AirToxScreen updates

- 2018 AirToxScreen was released in August 2022
 - Cancer risks
 - National average cancer risk is 20-in-1 million
 - 72 census tracts with cancer risks \geq 100-in-1 million across 24 areas of the country
 - Respiratory chronic noncancer hazard index (HI)
 - National average HI is 0.3
 - 130 tracts with a respiratory HI $>$ 1 across 25 areas of the country
- AirToxScreen mapping tool updated with these 2018 data:
<https://www.epa.gov/AirToxScreen/airtoxscreen-mapping-tool>
- 2020 risk-based point source review by state/local/tribes ongoing through October 25, 2022

POCs: Farkas.Caroline@epa.gov and Woody.Matt@epa.gov

The Future of AirToxScreen

- 2019 AirToxScreen
 - Tentative release December 2022
- 2020 AirToxScreen
 - First “regular schedule” AirToxScreen
 - Plan to transition to block-level point source risk
 - Scheduled for release winter 2023-2024

