National Air Toxics Assessment Review Process

The National Air Toxics Assessment (NATA) is EPA's screening assessment of risks from exposure to air toxics – designed to help state, local and tribal air agencies identify which pollutants, emission sources and places they may wish to study further to better understand any possible risks to public health from air toxics. The assessment is a large and complex undertaking to ensure the information we have is correct. State, local and tribal agencies are involved in every step of the process, from quality assuring early drafts of information to the release of the final NATA.

NATA assesses 180 pollutants, and approximately 74,000 census tracts in the U.S. It includes emissions information from more than 40,000 large stationary sources of air pollution, the entire nationwide emissions inventory for on-road and off-road mobile sources (everything from cars and trucks to lawn equipment and cruise ships), and tens of thousands of smaller stationary sources like gas stations and dry cleaners.

There are numerous changes during NATA's development. This is a normal part of any large analysis. NATA takes nearly two years to complete. EPA releases NATA once we are confident in its results. Note that NATA is not an indicator of absolute risk. There are a number of important data limitations for this screening tool.

EPA begins developing NATA using a draft National Emissions Inventory for a given year (for the most recent NATA, EPA used the draft emissions inventory for emissions year 2014), and ask EPA regions and states to quality assure the inventory information.

To facilitate this review, EPA conducts a preliminary risk assessment that focuses on large stationary sources and asks states to look for information that looks unusually high – or unusually low.

Based on an agreement with EPA and the states, states agencies are given several months to review the data. We provide this time to respect states' workloads and staffing levels, which often are small.

While states are reviewing the draft emissions inventory data for large stationary sources, EPA works to develop emissions inventories for all mobile sources (cars, trucks, buses, trains, cruise ships, lawn equipment, etc.), and for smaller stationary sources like dry cleaners and gas stations.

Once the states submit their comments to us, we evaluate those comments and discuss those with states as needed. There are numerous changes during this part of the review – many emissions points are changed to correct errors or to reflect updated information. This is a normal part of any large analysis.

Once the 2014 National Emissions Inventory was complete (version 2), we conducted the final risk assessment for NATA. This includes air quality modeling of emissions from mobile sources, small stationary sources and larger stationary sources to estimate the concentrations in the air at the census tract level and to associate those concentrations with a health value (such as an IRIS value).

After the final risk assessment is conducted, EPA conducts a final quality review. At this point in the analysis, we focus additional quality assurance/quality control work on census tracts where NATA points to potential elevated risk. In the 2014 NATA, we worked with regions and states to conduct additional quality control of the ethylene oxide results – double checking emissions information in census tracts where NATA showed potentially elevated risks and making any necessary corrections. Once those were made, we issued the NATA results.

The most recent NATA identified potential elevated chronic, lifetime cancer risks due to ethylene oxide emissions in several areas around the country, including near Chicago. U.S. EPA is working with the state and these facilities to evaluate their emissions calculations, stack test results, and pollution controls to further assess and address risk while expeditiously updating its national regulations for related sources.

How can I submit questions?

Email your questions to: eto@epa.gov