

## FACT SHEET: Air Toxics Risk in Cerritos, CA

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United States Environmental Protection Agency  
California Air Resources Board • South Coast Air Quality Management District

*The South Coast Air Quality Management District (AQMD) has conducted a localized analysis, based on current, measured emissions of the chemical hydrazine in Cerritos, California, and has determined that hydrazine levels in Cerritos pose an insignificant risk to public health. In addition, the U.S. Environmental Protection Agency has used recently updated estimates of 2002 emissions of hydrazine in Cerritos and has re-analyzed risks from those emissions. That new analysis estimates that the 2002 risks were insignificant compared to the much higher values reported in June, when EPA released the National-Scale Air Toxics Assessment (NATA). EPA, the California Air Resources Board, and the AQMD are committed to working together to ensure that emissions data, especially in the highest-risk areas, reflect the latest and most accurate estimates prior to future releases of NATA results.*

### Background

- The National-Scale Air Toxics Assessment (NATA) is a broad-scale nationwide assessment designed to identify areas of the country that may need further evaluation to gain a better understanding of potential risks, and where steps may be necessary to reduce air toxics emissions and/or exposure. It is not intended to be used as a tool to rank communities, and it does not estimate definitive risks for individuals living near specific sources of pollution. Estimating local risk requires more refined analyses, based on local information.
- NATA provides broad estimates of cancer and non-cancer risks across the country from exposure to "air toxics," also known as hazardous air pollutants. The analysis looks at exposure to 180 different chemicals, but does not estimate cancer risks from diesel particulate matter. California does include cancer risk from diesel particulate (diesel PM) and therefore California's community risk analyses will differ from EPA's.
- In June 2009, the U.S. Environmental Protection Agency (EPA) released results from the 2002 NATA analysis. The report estimates air toxics risk in 2002 for each census tract in the United States, using information on emissions combined with computer modeling of national exposures. EPA collaborates with state and local air pollution agencies to develop the information that is contained in NATA. The current NATA report estimates risk from emissions in the year 2002.
- The 2002 NATA results estimated cancer risk for a single census tract in Cerritos at 1,244 in 1 million. News organizations reported that risk as the highest in the country, based on the NATA analysis.
- According to the 2002 NATA analysis, emissions of the chemical hydrazine from one facility accounted for over 95 percent of the risk reported for a census tract in Cerritos. The facility is Heraeus Metal Processing, formerly PGP Industries Inc.
- Hydrazine is a colorless liquid with an odor similar to ammonia. It has several industrial uses, including the precious metal recovery process that is performed at Heraeus. The chemical is linked to cancer and other serious health effects.
- The NATA analysis used an emissions estimate of 1,250 pounds per year of hydrazine from the Heraeus facility. The emissions information came from the 2002 National Emissions Inventory, which is developed using emissions and location information reported to EPA. The estimate for the facility was self-reported by the facility's previous owner in 1991.

## Recent Actions

- After EPA released the 2002 NATA, the South Coast Air Quality Management District (AQMD) investigated to verify actual current hydrazine emissions from the Heraeus facility.
- In July 2009, AQMD engineers and inspectors were dispatched to the Heraeus facility to conduct inspections, search records, and to measure emission rates through source tests to identify potential hydrazine emissions.
- AQMD confirmed that the facility currently uses hydrazine in the precious metal recovery process. Hydrazine is used as a reducing agent and thus should react and be converted to less harmful products. The process that uses hydrazine at Heraeus is a closed system that is vented to approved air pollution control devices that are operating under a current permit. These control systems also act to reduce hydrazine emissions.
- The measurements made by AQMD showed that Heraeus currently emits less than two pounds per year of hydrazine, much less than the 1,250 pounds per year estimate provided to the NATA analysis.
- Using the 2009 measured data for hydrazine, AQMD used a computer model designed for looking at community scale impacts near to the source of emissions. Using that model, AQMD estimated a maximum lifetime cancer risk in the Cerritos neighborhood due to hydrazine emissions from the Heraeus facility of 0.50-in-1-million. This is 20 times lower than the threshold for public notification, and 50 times lower than the threshold for reducing toxics emissions as required by AQMD rules.
- EPA has revised the 2002 NATA for Cerritos based on the updated 2002 emissions estimates reflecting the AQMD's recent investigation.

## AQMD Studies of Risk from Air Toxics

- Previous air toxics studies by AQMD (MATES III) have shown that the average cancer risk in Southern California is approximately 1,200-in-1 million, with about 84 percent of that risk due to exposure to diesel PM. EPA does not estimate cancer risks from diesel PM in NATA, based on guidance from its external science advisers. AQMD has recommended that EPA include cancer estimates from diesel PM in future NATA analyses.
- The latest MATES study estimated cancer risk in the Cerritos neighborhood near Heraeus between 1,200 and 1,500-in-1-million, with the estimated risk being driven primarily by diesel PM.
- These levels of risk are unacceptably high and AQMD, CARB and EPA are working to reduce exposure to diesel PM and other air toxics.

## For more information:

- About EPA's National-Scale Air Toxics Assessment:  
[www.epa.gov/nata](http://www.epa.gov/nata)
- About South Coast AQMD's MATES III Multiple Air Toxics Exposure Study  
<http://www.aqmd.gov/prdas/matesIII/matesIII.html>