

FACT SHEET

FINAL AIR TOXICS STANDARDS FOR AREA SOURCES IN THE CHEMICAL MANUFACTURING INDUSTRY

ACTION

- On October 16, 2009, the Environmental Protection Agency (EPA) issued national air toxics standards for smaller-emitting sources, known as area sources, in the chemical manufacturing industry. Toxic air pollutants, or air toxics, are known or suspected to cause cancer and other health problems.
- These standards affect certain process units in any new or existing facility that falls into one of nine area source categories in the chemical manufacturing sector and that emits one or more of 15 specific urban air toxics.
- The nine chemical manufacturing sectors are:
 - Agricultural Chemicals and Pesticides Manufacturing,
 - Cyclic Crude and Intermediate Production,
 - Industrial Inorganic Chemical Manufacturing,
 - Industrial Organic Chemical Manufacturing,
 - Inorganic Pigments Manufacturing,
 - Miscellaneous Organic Chemical Manufacturing,
 - Plastic Materials and Resins Manufacturing,
 - Pharmaceutical Production,
 - Synthetic Rubber Manufacturing.
- The air toxics are:
 - acetaldehyde,
 - arsenic compounds,
 - butadiene,
 - cadmium compounds,
 - chloroform,
 - chromium compounds,
 - dichloropropene
 - ethylene dichloride,
 - hexachlorobenzene,
 - hydrazine,
 - lead compounds,
 - manganese compounds,
 - methylene chloride,
 - nickel compounds,
 - quinoline.
- The final rule affects an estimated 450 existing chemical manufacturing area sources.
- The final rule includes emission standards in the form of management practices for all process equipment, equipment leaks, storage tanks, and transfer operations. The

management practices require quarterly inspections for leaks. The management practices also require owners and operators to keep equipment openings in the closed position during operation and devise inspections for detection of and response to leaks in the heat exchange system. The final rule further requires onsite or offsite treatment of all wastewater.

- In addition to the management practices, the final rule includes generally available control technologies (GACT) standards for certain process vents, storage tanks, heat exchange systems, and wastewater systems. Specifically, the rule requires:
 - A 95-percent emissions reduction for continuous process vents, except during periods of startup and shutdown at which time an 85-percent reduction is required;
 - An 85-percent reduction for existing batch process vents (90-percent from new sources);
 - A 95-percent reduction for vents emitting metal toxic air pollutants;
 - Improved controls for storage tanks and quarterly monitoring for heat exchange systems; and
 - Removal of organic toxic air pollutants from certain wastewater streams before discarding streams to a wastewater treatment system.
- Facilities in this industry are required to submit one-time notifications of applicability and compliance status, submit semiannual compliance reports under certain circumstances, and keep records to demonstrate compliance with the final rule.
- The final rule will reduce air toxics by 248 tons per year and particulate matter by 570 tons per year at an annualized cost of \$3.2 million. The total capital cost of the proposed rule is estimated at \$2.8 million.
- The final rule exempts the majority of area sources in the chemical manufacturing industry from Title V permitting requirements. Approximately one third of the facilities are required to obtain a Title V permit for reasons other than being subject to the final rule. Of the remaining facilities, the rule does not exempt ones that reduced their toxic air pollution emissions to levels below the “major source” threshold by installing air pollution control devices.
- On October 16, 2009, the D.C. Circuit issued a mandate in a decision that eliminated a regulatory exemption for periods of startup, shutdown and malfunction. In light of that decision, the final standards in the chemical manufacturing area source rule apply at all times.

BACKGROUND

- The Clean Air Act requires EPA to identify categories of industrial sources that emit one or more of 187 listed toxic air pollutants. These industrial categories include both major and area sources.
- For major sources within each source category, the Clean Air Act requires EPA to develop standards that restrict emissions to levels consistent with the lowest-emitting (also called best-performing) plants. Major sources are those that emit 10 tons a year or more of a single toxic air pollutant or 25 tons a year or more of a combination of air toxics.
- The Clean Air Act allows EPA to develop standards or requirements which provide for the use of GACT and management practices rather than the maximum achievable control technology required for major sources. Area sources emit less than 10 tons per year of a single air toxic and less than 25 tons per year of a combination of air toxics.
- Further, the Clean Air Act requires EPA to (1) identify at least 30 toxic air pollutants that pose the greatest threat to public health in urban areas, and (2) identify and list the area source categories that represent 90 percent of the emissions of the urban air toxics associated with area sources and regulate them to ensure that the emissions of these “urban” air toxics are reduced. EPA implemented these requirements through the Integrated Urban Air Toxics Strategy.
- EPA published the Strategy in the *Federal Register* on July 19, 1999, and it included:
 - A list of the 33 air toxics that present the greatest threat to public health in the largest number of urban areas. Of these 33 urban air toxics, EPA has identified the 30 toxic air pollutants with the greatest contribution from smaller commercial and industrial operations or "area" sources, as defined in the Clean Air Act. (See <http://www.epa.gov/ttn/atw/urban/list33.html> for the full list
 - A list of 29 area source categories that contribute to the emissions of these 30 listed air toxics. Subsequent notices published on June 26 and November 22, 2002, added 41 source categories to this list of area sources and fulfilled the Clean Air Act requirement to identify and list area source categories representing at least 90 percent of the emissions of the 30 “listed” (or area source) toxic air pollutants. The nine source categories included in today’s final rule are included in this list of area sources. For more information, go to <http://www.epa.gov/ttn/atw/urban/urbanpg.html>.

- **FOR FURTHER INFORMATION**

- To download a copy of the notice go to EPA's Web site at: <http://www.epa.gov/ttn/oarpg/t3pfpr.html>.
- Today's final rule and other background information are also available either electronically at <http://www.regulations.gov>, EPA's electronic public docket and comment system, or in hardcopy at the EPA Docket Center Public Reading Room.
- The Public Reading Room is located at EPA Headquarters, room number 3334 in the EPA West Building, 1301 Constitution Avenue, NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. Visitors are required to show photographic identification, pass through a metal detector, and sign the EPA visitor log. All visitor materials will be processed through an X-ray machine as well. Visitors will be provided a badge that must be visible at all times.
- Materials for this final action can be accessed by using Docket ID No. EPA-HQ-OAR-2008-0334.
- For further information about the final rule, contact Randy McDonald of EPA's Office of Air Quality Planning and Standards at (919) 541-5402, or mcdonald.randy@epa.gov.

