

FACT SHEET

FINAL AIR TOXICS STANDARDS FOR CLAY CERAMICS MANUFACTURING, GLASS MANUFACTURING, AND SECONDARY NONFERROUS METALS PROCESSING AREA SOURCES

ACTION

- On December 14, 2007, the Environmental Protection Agency (EPA) issued final air toxics standards for smaller-emitting sources, known as area sources, in the clay ceramics manufacturing, glass manufacturing, and secondary nonferrous metals processing industries. Toxic air pollutants, or air toxics, are known or suspected to cause cancer and other health problems.
- Area sources are commercial and industrial operations that release lesser quantities of toxic pollutants into the air. Area sources have the potential to 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. Sources that emit more than these amounts are characterized as "major" sources.
- The requirements of these rules apply to new as well as existing facilities in all three source categories.
- Two of the three standards include monitoring and emission testing requirements to show compliance with the rules. The standard for clay ceramics needs no monitoring or emission testing requirements to show compliance.

FINAL RULE SUMMARIES

Clay Ceramics Manufacturing

- The final clay ceramics manufacturing rule includes equipment standards and management practices designed to reduce emissions of toxic metals from atomized spray glaze operations and kilns that fire glazed ceramic ware.
- Facilities in this industry are also required to conduct monitoring and recordkeeping activities and submit one-time notifications of applicability and compliance status.
- EPA estimates that 51 existing clay ceramics manufacturing facilities will be affected by the final rule.
- EPA is exempting area sources in the clay ceramics manufacturing industry from operating permit requirements, called Title V permitting requirements, except where an affected facility is required to obtain a Title V permit for reasons other than being subject to this final rule.

- Existing area source clay ceramics manufacturing facilities are currently well-controlled in terms of metal air toxics emissions as a result of state and national standards, permitting requirements, and management practices already taken by the industry to reduce air toxics. The final rule will codify existing practices and is not expected to change the level of emissions control already being achieved.
- The final clay ceramics manufacturing rule will have little cost impact on existing area sources. One-time costs average less than \$1,000 per facility.
- The requirements of this final rule apply to new as well as existing sources.

Glass Manufacturing:

- The final glass manufacturing rule includes emission limits for glass manufacturing furnaces.
- Glass manufacturers can choose one of two emission limits (a PM emission limit and a HAP emission limit) to comply with the rule: 0.2 lb PM per ton glass produced or 0.02 lb metal HAP per ton glass produced.
- Facilities in this industry are also required to conduct monitoring and recordkeeping activities and submit one-time notifications of applicability and compliance status.
- To ensure compliance with this rule, glass manufacturing facilities are also required to conduct initial performance tests if tests have not been conducted within the past 5 years of the compliance date for the rule.
- EPA estimates that the final rule will affect approximately 21 existing glass manufacturing facilities; these plants operate continuous furnaces processing at least 50 tons per year of glass formulations containing metal air toxics.
- Most glass manufacturers are already subject to Title V requirements because they are major sources of particulate matter, nitrogen oxides, or both. Therefore, this rule does not exempt glass manufacturers from Title V requirements.
- The final glass manufacturing rule is expected to reduce nationwide metal air toxics emissions up to 22 tons per year. EPA estimates that three glass facilities will have to install air pollution control equipment to meet the emission limits in the final rule. The remaining affected glass manufacturing furnaces currently meet either the PM emission limits or the HAP emission limits in the rule.
- The annual compliance cost for the final glass manufacturing rule is estimated to average about \$23,400 per facility.
- One small business is impacted by the final rule.
- While new sources are subject to the same requirements as existing sources under this final

rule, EPA does not anticipate any new glass manufacturing furnaces processing metal air toxics being built within the next 3 years because the market is currently saturated and capacity at such plants far exceeds the existing production rates.

Secondary Nonferrous Metals Processing:

- Secondary Nonferrous Metals Processors can choose to comply with the rule by meeting one of two alternate emission limits at their crushing and screening operations and furnace melting operations.
- Existing sources can either utilize fabric filter controls achieving 99% efficiency or limit outlet particulate matter concentrations to no more than .015 grains per dry standard cubic foot.
- New sources are required to achieve 99.5% particulate matter emission control efficiency or limit outlet particulate matter concentrations to no more than 0.010 grains per dry standard cubic foot using fabric filters.
- Facilities in this industry are also required to conduct monitoring and recordkeeping activities and submit one-time notifications of applicability and compliance status.
- To ensure compliance with this rule, secondary nonferrous metals processing facilities are also required to conduct initial performance tests if tests have not been conducted within the past 5 years of the compliance date for this rule.
- EPA estimates that the final rule will affect approximately 10 existing secondary nonferrous metals processing facilities.
- EPA is exempting facilities in the Secondary Nonferrous Metals Processing area source category from reporting requirements in Title V (permitting requirements), except where an affected facility is required to obtain a Title V permit for reasons other than being subject to this final rule.
- Existing area source Secondary Nonferrous Metals Processing facilities are currently well-controlled in terms of metal air toxics emissions as a result of state and national standards, permitting requirements, and management practices already taken by the industry to reduce air toxics. The final rule will codify existing practices and is not expected to change the level of emissions control already being achieved.
- The final Secondary Nonferrous Metals Processing rule will have little cost impact on existing area sources. One-time costs average about \$350 per facility.
- New sources are subject to the same requirements as existing sources under this final rule. However, we do not anticipate any new sources in this industry in the next 3 years because the market is saturated and the current capacity at existing plants far exceeds the existing production rates.

BACKGROUND

- The Clean Air Act requires EPA to identify categories of industrial sources that emit one or more of the listed 187 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.
- For area sources within each source category, the Clean Air Act allows EPA to develop standards or requirements which provide for the use of generally available control technologies (GACT) or management practices rather than the maximum achievable control technology (MACT) required for major sources.
- Further, the Clean Air Act requires EPA to (1) identify the 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 implements these requirements through the Integrated Urban Air Toxics Strategy.
- EPA published the Strategy on July 19, 1999, in the *Federal Register* that 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 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 for at least 90 percent of the emissions of the 30 “listed” (or area source) HAPs. The clay ceramics manufacturing, glass manufacturing, and secondary nonferrous metals processing source categories included in today’s final rules are included on the area source category list. For more information, go to <http://www.epa.gov/ttn/atw/urban/urbanpg.html>.
- As of June 2007, EPA has regulated 28 of these 70 source categories and is working under court ordered schedules to issue the remaining area source rules listed under the Urban Air Toxics Strategy.

- Area sources in the three source categories affected by these rules emit metals that are air toxics including arsenic, cadmium, chromium, lead, manganese, and nickel. Exposure to these compounds may cause cancer, central nervous system, respiratory, gastrointestinal, reproductive, and developmental effects; brain, liver, and kidney damage; and acute health disorders such as respiratory and skin irritation.

FOR MORE INFORMATION

- To download a copy of the final rules, go to EPA's World Wide Web site at: <http://www.epa.gov/ttn/oarpg>, under Recent Additions.
- For further information about the final Clay Ceramics Manufacturing rule, contact Mr. Bill Neuffer of EPA's Office of Air Quality Planning and Standards (OAQPS) at (919) 541-5435 or neuffer.bill@epa.gov. For further information about the final Glass Manufacturing or Secondary Nonferrous Metals Processing rules, contact Ms. Susan Fairchild of EPA/OAQPS at (919) 541-5167 or fairchild.susan@epa.gov.