February 28, 2003

FACT SHEET

FINAL REGULATIONS TO REDUCE TOXIC AIR POLLUTANT EMISSIONS FROM BRICK AND STRUCTURAL CLAY PRODUCTS MANUFACTURING AND CLAY CERAMICS MANUFACTURING

TODAY'S ACTION

- The Environmental Protection Agency (EPA) is issuing a final rule to reduce emissions of toxic air pollutants from the brick and structural clay products manufacturing industry.

- The EPA also is issuing a final rule to reduce emissions of air toxics from the clay ceramics manufacturing industry.

- Air toxics are those pollutants known or suspected to cause cancer or other serious health and environmental effects.

- The final rule for brick and structural clay products manufacturing will limit emissions that occur during the manufacture of face brick; structural brick; brick pavers; other brick products; clay pipe; roof tile; extruded floor and wall tile; and other extruded, dimensional clay products.

- The clay ceramics manufacturing final rule will limit emissions that occur during the production of pressed floor tile, pressed wall tile, other pressed tile, and sanitaryware (e.g., sinks and toilets).

- The industries targeted by these rules emit a number of air toxics, including hydrogen fluoride (HF), hydrogen chloride (HCl), and metals (antimony, arsenic, beryllium, cadmium, chromium, cobalt, mercury (in particulate form), manganese, nickel, lead, and selenium). Exposure to these compounds has been demonstrated to cause health problems, including cancer (three of the air toxics are classified by EPA as known carcinogens, four are probable human carcinogens, and one is a possible human carcinogen).

- The final rules include production-based emission limits for HF and HCl. Those reductions limit pounds of pollutant emitted per ton of fired product. As alternatives, facilities may achieve percent reductions in HF and HCl emissions. The final rules also include production-based limits on airborne particles or particulate matter (PM).

- The EPA intends to use PM as a surrogate for measuring and regulating metal air toxic emissions. Particulate matter emissions are closely associated with emissions of the metal air toxics targeted by these rules. If controls for PM emissions are installed, metal air toxics emissions will be controlled at the same time. The use of PM as a surrogate reduces monitoring and emission testing costs.

BACKGROUND

- Under the Clean Air Act, EPA is required to regulate emissions of 188 specific air toxics. On July 16, 1992, EPA published a list of industry groups, known as source categories, that emit one or more of these air toxics. For listed categories of "major" sources (those that have the potential to emit 10 tons per year or more of a single listed air toxic or 25 tons per year or more of a combination of air toxics), the Clean Air Act requires EPA to develop standards that restrict emissions to levels consistent with the lowest emitting (also called best-performing) facilities. These standards are based on stringent air pollution reduction measures known as maximum achievable control technology.

- The Agency's published list of industry groups to be regulated included "Clay Products Manufacturing." Early in the regulatory development process, four distinct industries were identified within the listed source category. Standards for two of these distinct industries, "Brick and Structural Clay Products Manufacturing" and "Clay Ceramics Manufacturing" were subsequently proposed on July 22, 2002.

- The brick and structural clay products production process consists of preparing the raw materials (primarily clay and shale), forming the processed materials into bricks and shapes, and drying and firing the bricks and shapes.

- The clay ceramics production process consists of processing clay, shale, and other additives, forming the processed materials into tile and sanitaryware shapes, and drying, glazing, and firing the tile and sanitaryware shapes.

BENEFITS AND COST

- The final brick and structural clay products rule will reduce emissions of HF, HCl, and metal air toxics from existing tunnel kilns with design capacities equal to or greater than 10 tons per hour by approximately 2,300 tons annually – a 35 percent reduction from the estimated existing baseline level of emissions. The EPA estimated the baseline level of emissions using data from 1996 through 2002.

- The EPA estimates that the nationwide capital cost to comply with the final brick and structural clay products rule will be $63 million and that the annualized cost will be about $24 million per year. Those estimates include control and monitoring equipment costs, operation and maintenance expenses, emission testing costs, and recordkeeping and reporting costs.

- The final clay ceramics rule will reduce emissions of HF, HCl, and metal air toxics from new clay ceramics tunnel kilns (i.e., built after July 22, 2002). The final clay ceramics rule also

requires that all kilns use natural gas or an equivalent clean-burning fuel. Because all clay ceramics kilns for which EPA has data are fired by natural gas or propane, the compliance costs for existing sources will be minimal.

- The EPA estimates that existing sources of air toxics at 68 brick and structural clay products manufacturing facilities will be affected by the final brick and structural clay products rule. Thirteen of those facilities will incur only monitoring, recordkeeping, and reporting costs.

- The EPA estimates that during each of the next 5 years, three new sources at facilities that were not previously subject to the rule, will be affected by the final rule.

- The EPA estimates that eight clay ceramics manufacturing facilities will be affected by the final clay ceramics rule. During the next 5 years, EPA expects one new source at a sanitaryware manufacturing facility will be affected by the final rule.

FOR MORE INFORMATION

- To download the final rules from EPA's website on the Internet, go to "Recent Actions" at the following address: *http://www.epa.gov/ttn/oarpg/remain.html.*

- For further information about the final rules, contact Ms. Mary Johnson of the EPA's Office of Air Quality Planning and Standards, Emission Standards Division, Combustion Group at (919) 541-5025 or by electronic mail at *johnson.mary@epa.gov*.

- The EPA's Office of Air and Radiation's (OAR) homepage on the Internet contains a wide range of information on the air toxics program and many other air pollution programs and issues. The OAR home page address is: *http://www.epa.gov/oar/*.