

June 17, 2002

## FACT SHEET

### PROPOSED REGULATIONS TO REDUCE TOXIC AIR POLLUTANTS FROM BRICK AND STRUCTURAL CLAY PRODUCTS MANUFACTURING AND CLAY CERAMICS MANUFACTURING

#### TODAY'S ACTION

- The Environmental Protection Agency (EPA) is proposing a rule to reduce emissions of toxic air pollutants, also known as air toxics, from the brick and structural clay products manufacturing industry.
- EPA also is proposing a rule to reduce emissions of air toxics from the clay ceramics manufacturing industry.
- Air toxics are those pollutants known or suspected to cause cancer and other serious health or developmental problems.
- The proposed brick and structural clay products rule would 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 proposed clay ceramics rule would 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 this rule emit a number of air toxics, including hydrogen fluoride (HF), hydrogen chloride (HCl), and metal air toxics (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.
- EPA will take comment on the proposed rules for 60 days after they are published in the *Federal Register*.

#### BACKGROUND

- The Clean Air Act of 1990 requires EPA to identify industrial or "source" categories that emit one or more of the listed 188 toxic air pollutants.
- For major sources within each source category, the 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 sources that emit 10 tons per year or more of a single air toxic or 25 tons per year or more of a combination of air toxics. EPA estimates that 169 brick and structural clay products manufacturing facilities and 8 clay ceramics manufacturing facilities are major sources.
- 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 proposed regulations include production-based emission limits for HF and HCl. These reductions limit pounds of pollutant emitted per ton of fired product. As an alternative, facilities may achieve 95 percent reductions in HF emissions and 90 percent reductions in HCl emissions. The proposed regulations also include a production-based limit on airborne particles or particulate matter.
- EPA proposes to use particulate matter 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 particulate matter emissions are installed, metal air toxics emissions will be controlled at the same time. The use of a surrogate reduces monitoring and emission testing costs.
- The proposed brick and structural clay products rule would 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 2,800 tons annually – a 45 percent reduction from 1996 levels.
- EPA estimates that the nationwide capital cost to comply with the brick and structural clay products rule would be \$85 million and that the annual cost would be \$36 million/yr. These estimates include control and monitoring equipment costs, operation and maintenance expenses, emission testing costs, and recordkeeping and reporting costs.
- The proposed clay ceramics rule would not reduce air toxic emissions from existing sources. The emissions reductions required by this proposed rule are the maximum achievable controls for all kilns that operate continuously (i.e., tunnel kilns and roller kilns). EPA analyzed the impact of additional control devices, but the identified controls would have imposed

unacceptably high costs to existing plants. Therefore, the proposed standards would apply only to new clay ceramics tunnel kilns and roller kilns built after the proposed rule is published. There would be no cost to existing sources to comply with this clay ceramics rule.

- Owners and operators of brick and structural clay products and clay ceramics facilities would also be required to comply with the monitoring, recordkeeping, and reporting requirements that are outlined in the rules.

### **WHO WILL BE AFFECTED BY EPA'S RULES?**

- EPA estimates that existing sources of air toxics at 59 brick and structural clay products manufacturing facilities would be affected by today's brick and structural clay products rule.
- EPA estimates that during each of the next five years, three new sources, including one at an existing brick and structural clay products manufacturing facility that was not previously subject to the rule, would be affected by today's proposed rule.
- Existing sources at clay ceramics manufacturing facilities would not be affected by today's clay ceramics rule.
- EPA estimates that during the next five years, new sources at two clay ceramics manufacturing facilities would be affected by today's proposed rule.
- EPA's rules provide flexibility to industry by offering a choice of compliance options for HF and HCl emissions. Facilities may reduce HF and HCl emissions to a specified emission rate or by a certain percent.
- The required emission reductions can be achieved through use of a dry lime injection fabric filter system, dry lime scrubber fabric filter system, wet scrubber, or other control device.

### **FOR MORE INFORMATION**

- To download the proposed rule from EPA's page on the World Wide Web, go to <http://www.epa.gov/ttn/oarpg>. For additional information, contact Mary Johnson of the EPA's Office of Air Quality Planning and Standards at (919) 541-5025 or by e-mail at [johnson.mary@epa.gov](mailto:johnson.mary@epa.gov).
- To comment on the proposed brick and structural clay products rule, submit written comments to the Air and Radiation Docket and Information Center (6102), Attention Docket Number A-99-30, Room M-1500, U.S. Environmental Protection Agency, 401 M Street, SW,

Washington, DC 20460. Submit electronic mail comments in ASCII file or Wordperfect® version 5.1, 6.1, or Corel 8 to [a-and-r-docket@epa.gov](mailto:a-and-r-docket@epa.gov). All comments and data submitted in electronic form must note the docket number: A-99-30.

- To comment on the proposed clay ceramics rule, submit written comments to the Air and Radiation Docket and Information Center (6102), Attention Docket Number A-2000-48, Room M-1500, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460. Submit electronic mail comments in ASCII file or Wordperfect® version 5.1, 6.1, or Corel 8 to [a-and-r-docket@epa.gov](mailto:a-and-r-docket@epa.gov). All comments and data submitted in electronic form must note the docket number: A-2000-48.
- EPA's Office of Air and Radiation's homepage on the Internet contains a wide range of information on the air toxics program, as well as many other air pollution programs and issues. The address is: [www.epa.gov/oar/](http://www.epa.gov/oar/).