FACT SHEET

Proposed Rule to Reduce Toxic Air Emissions From Lime Manufacturing Plants

TODAY'S ACTION

- ! The Environmental Protection Agency (EPA) is proposing a rule to reduce toxic air pollutant emissions from new and existing lime manufacturing plants. Toxic air pollutants, or air toxics, are those pollutants known or suspected to cause cancer or other serious health effects.
- ! This rule applies to all commercial and captive (produced and utilized internally; not sold on the open market) lime manufacturing plants (except for those located at pulp and paper mills and beet sugar factories) that are located at sources that emit enough toxic air pollutants to be defined as "major" under the Clean Air Act. A major stationary source of air toxics emissions is one with the potential to emit greater than 10 tons per year of any one air toxic or 25 tons per year of any combination of air toxics.
- ! Lime manufacturing is an energy intensive process in which lime is made by crushing and then heating limestone in a kiln. The kiln is a large furnace that is typically fueled by coal, oil, natural gas, and/or petroleum coke.
- ! The main source of air toxics emissions from a lime plant is the kiln. Emissions originate from the burning of fuels and the heating of feed material. Air toxics are also emitted in trace quantities from the grinding, cooling, and other materials processing steps in the manufacturing process.
- ! There are approximately 70 commercial and 10 captive lime manufacturing plants throughout the U.S.
- ! The primary air toxics present in the exhaust gases are metals such as arsenic, cadmium, chromium, and nickel; and hydrogen chloride. The health effects associated with exposure to these air toxics include cancer, respiratory irritation, and damage to the nervous system.
- ! EPA worked with states, industry representatives, and associated groups and trade associations to develop this proposal. In addition, to mitigate impacts to small businesses, EPA convened a Small Business Advocacy Review Panel, to receive advice and recommendations from representatives of the small entities that potentially would be subject to the proposed rule requirements.
- ! EPA will take public comment on the proposed rule for 60 days following publication in the <u>Federal Register</u>. The Agency expects to finalize the rule within nine months after proposal.

BENEFITS AND COST

- ! When promulgated, this action would reduce air toxic metals emissions by about 23 tons per year in the fifth year after promulgation.
- **!** EPA expects implementation of this proposed rule will result in national annualized costs of approximately \$22 million per year, which includes \$622,000 for recordkeeping and reporting.
- ! EPA expects that possibly two companies may cease their current lime manufacturing operations as a result of this proposed rule.

WHAT THE PROPOSED RULE REQUIRES

- ! This proposal would limit the combined particulate matter (PM) emissions from existing lime kilns and coolers to 0.12 pounds of PM per ton of feed to the kiln. It would limit the combined PM emissions from new lime kilns and coolers to 0.10 pounds of PM per ton of feed to the kiln. PM is a surrogate, or more easily measured but meaningful substitute, pollutant for non-volatile toxic metals.
- ! This proposal would also limit PM emissions and opacity from certain types of materials processing operations at a lime manufacturing plant, such as screening operations, storage bins, and material conveying equipment. Opacity would also serve as a surrogate for toxic metals.
- ! Materials processing operations located in the quarry, and lime hydrators, would not be subject to this proposal.
- ! EPA's proposed rule would allow the use of a test method developed by the American Society for Testing and Materials for measuring emissions of HCl from lime kilns. This new method may be used by lime plant owners/operators to determine if their plants are major sources of air toxics.
- ! The rule would require continuous monitoring of operating parameters which indicate the performance of the air pollution controls and emissions of pollutants. EPA outlines the details of the monitoring, recordkeeping, and reporting requirements in the rule.
- ! Owners and operators of lime manufacturing plants who would have to comply with this proposed rule would also need to meet certain recordkeeping and reporting requirements, including semiannual compliance reports.

BACKGROUND

- ! Under the Clean Air Act, EPA is required to regulate emissions of 188 listed toxic air pollutants. The Clean Air Act also required EPA to identify source categories that emit one or more of these air toxics. For listed categories of "major" sources, the Act requires EPA to develop a list of industries, known as source categories, that emit one or more of the 188 listed air toxics. EPA is issuing standards that require the application of stringent air pollution reduction measures known as maximum achievable control technology.
- ! EPA's published list of source categories includes the lime manufacturing industry.

FOR MORE INFORMATION AND TO COMMENT

- ! To download the standard from EPA's website on the Internet, go to "Recent Actions" at the following address: www.epa.gov/ttn/oarpg/ramain.html.
- ! The notice is also available through EPA's Air and Radiation Docket and Information Center (Docket Number OAR-2002-52), by calling (202)260-7548 or fax (202)260-4000 (a reasonable fee may be charged for copying).
- ! Written comments on the proposed rule should be submitted (in duplicate) to: Lime Manufacturing NESHAP Docket, EPA Docket Center (Air Docket), U.S. EPA West, Mail Code 6102T, Room B108, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, Attention Docket ID No. OAR-2002-0052. Please also send a separate copy to Mr. Joseph Wood, Office of Air Quality Planning and Standards, Minerals and Inorganic Chemicals Group (C504-05), Research Triangle Park, North Carolina 27711; facsimile number (919)541-5600; electronic mail address: wood.joe@epa.gov.
- ! If you are submitting proprietary information, you must clearly distinguish it from other comments and clearly label it confidential. To ensure proprietary information is not released or inadvertently placed in the public docket, send such information directly to Mr. Joseph Wood, c/o Document Control Officer, MC-C404-02, USEPA, RTP, NC 27711.
- ! For general information about the proposed standard, contact Mr. Joseph Wood of EPA's Office of Air Quality Planning and Standards, at (919) 541-5446 or by e-mail at wood.joe@epa.gov.
- ! The EPA's Office of Air and Radiation's (OAR's) 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's home page address is: www.epa.gov/oar/.