

11/01/01

FACT SHEET

PROPOSED RULE TO REDUCE TOXIC AIR EMISSIONS FROM ASPHALT PROCESSING AND ASPHALT ROOFING MANUFACTURING FACILITIES

TODAY'S ACTION

- The Environmental Protection Agency (EPA) is proposing a regulation to reduce emissions of toxic air pollutants, or air toxics, from asphalt processing and asphalt roofing manufacturing facilities. Air toxics are those pollutants known or suspected to cause cancer or other serious health effects in humans.
- This regulation would apply to sources of air toxics from asphalt processing facilities and asphalt roofing manufacturing facilities. Asphalt processing facilities produce "blown" asphalt for use in the asphalt roofing manufacturing industry. Asphalt roofing manufacturing facilities produce shingles and roll roofing products by applying the "blown" asphalt to a fiberglass or felt substrate. Both types of facilities can be located together but asphalt processing facilities can also be located at refineries.
- Today's proposed action would reduce gaseous and particulate air toxics emitted at a number of points at these facilities, including tanks, asphalt loading operations, and other points within the roofing manufacturing facility.
- Facilities would be able to comply with the requirements of today's proposed rule by installing control devices at emission points to reduce gaseous and particulate air toxics.
- EPA worked with major stakeholders, including representatives from the industry, in developing the proposal.
- EPA will accept comment on the proposal for 60 days after publication of the proposed rule in the *Federal Register*. After reviewing all comments, the Agency anticipates issuing the final rule in 2002.

BACKGROUND

- The Clean Air Act (CAA) of 1990 requires EPA to identify source categories that emit one or more of 188 listed air toxics.
- For major sources within each source category the CAA requires EPA to develop standards that restrict emissions to levels consistent with the lowest-emitting plants. According to the CAA, major sources emit 10 tons a year or more of a single toxic air pollutant, or 25 tons or more of a combination of toxic air pollutants.

BENEFITS AND COST

- EPA's proposed rule would reduce toxic air emissions from asphalt processing and roofing manufacturing facilities by about 10 tons per year. The air toxics reduced include numerous organic compounds such as formaldehyde, hexane, phenol, polycyclic organic matter, and toluene. Exposure to these air toxics may cause cancer, central nervous system problems, liver damage, respiratory problems and skin irritation. The proposed rule would also reduce total hydrocarbon emissions (both gaseous volatile organic compounds (VOC) and particulate matter) by about 149 tons annually. VOC contribute to the formation of ground-level ozone (smog) which can aggravate a number of respiratory diseases, including asthma.
- EPA estimates the total annualized cost of compliance at about \$1.01 million. These costs include adding or upgrading emission control systems, purchasing monitoring systems, monitoring, recordkeeping and reporting.
- EPA estimates the proposed rule would increase the price of asphalt roofing products by less than 0.1 percent. No asphalt processing or asphalt roofing manufacturing facility is expected to close as a result of the proposed rule.

WHAT THE PROPOSED RULE REQUIRES

- The proposed rule would apply to all new and existing asphalt processing and asphalt roofing manufacturing facilities defined as a major source or located at a major source of air toxic emissions.
- Asphalt processing facilities would be required to meet emission limitations for each asphalt storage tank, asphalt loading rack, and blowing still. A blowing still is a tank of heated asphalt through which air is blown. This process oxidizes the asphalt to give it the desired characteristics. EPA expects both new and existing facilities to use thermal oxidation as the primary means of control. During thermal oxidation, a thermal oxidizer burns air emissions sufficiently to produce carbon dioxide and water as byproducts.
- Asphalt roofing manufacturing facilities would be required to meet emission limitations for each coating mixer, coater, saturator (a tank where roofing felt is dipped to saturate it with asphalt), wet looper (a series of rollers onto which the saturated felt is rolled to allow additional time for asphalt absorption into the felt), asphalt storage tank, and sealant and adhesive applicator. EPA expects the primary means of control for existing roofing facilities to be a particulate matter control device (e.g., a baghouse which filters particles from an emission stream using a porous fabric) or a thermal oxidizer. New facilities are expected to use thermal oxidizers.
- Some emission capture systems and control devices also would be required to meet visible emissions and opacity limits (e.g., emissions could not be visible more than a specific amount of time or exceed a certain opacity). Limitations on control device operations relating to operating temperature or pressure drop also would apply.
- Many facilities subject to the proposed rule have already installed air pollution control systems required by state rules or federal new source performance

standards. Under the CAA, EPA is required to set "new source performance standards" to ensure that emissions from newly built or reconstructed facilities meet strict limits.

- EPA anticipates that only nine of the 18 existing facilities are estimated to meet the definition of "major source" and will need to upgrade or install emission control systems to meet the proposed rule requirements.
- The monitoring requirements of the proposed rule include continuous parameter monitoring systems (CPMS) and visual (visible emissions, opacity) inspections, depending on the type of affected sources. CPMS continuously monitor control device parameters such as temperature or pressure drop. Initial performance tests are also required prior to the compliance date. Performance tests measure whether or not the source is meeting the emission standards.
- The recordkeeping and reporting requirements in the proposed rule are similar to those required for other EPA air toxics regulations.

FOR MORE INFORMATION

- To download a copy of the proposed rule, go to EPA's World Wide Web site at <http://www.epa.gov/ttn/oarpg/>.
- For further information about the proposed rule, contact Mr. Rick Colyer of EPA's Office of Air Quality Planning and Standards at (919) 541-5262 or colyer.rick@epa.gov.
- Send any comments on the proposed rulemaking (in duplicate if possible) to: Air and Radiation Docket and Information Center (6102), Attention: Docket No. A-95-32, Room M-1500, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460. You may also submit comments and data by electronic mail (e-mail) to: A-and-R-Docket@epamail.epa.gov.
- Submit electronic comments as an ASCII file to avoid the use of special characters and encryption problems or in WordPerfect® version 5.1, 6.1, or Corel® 8 file format. Electronic comments and data must note the docket number (Docket No. A-95-32). You may file electronic comments online at many Federal Depository Libraries. *Do not submit confidential business information by e-mail. See the Federal Register notice for more information on how to handle the submittal of confidential business information.*
- 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 Office of Air and Radiation's home page address is: <http://www.epa.gov/oar/>.