

However, EPA acknowledges that a higher percentage of secondary processors are likely to be small businesses than the percentage of primary processors that are small businesses. In addition, 5 of the 11 companies that manufacture the products that this rule proposes to ban are small businesses. This proposed rule could have significant impact on these few companies.

The estimated costs of the rule could be seen as significant. However, the overall benefits to society of asbestos-containing products are diminishing with the current availability and the continued development of various nonasbestos substitutes. The costs of the rule are speculative and probably are overestimated. In addition, many economic impacts of this rule are likely to be short-term and spread across large populations with only negligible impact on the typical consumer. This rule is not expected to cause dramatic price increases in typical consumer products. Consumer losses caused by this rule would be spread across the entire consumer population. Jobs displaced by this rule are likely to be offset by increased employment in companies producing substitutes for asbestos products. Potential consumer and producer costs are likely to be offset by the economic costs avoided by this rule, i.e., avoidance of the morbidity costs of asbestos-related diseases; the cost of removal and disposal of asbestos products; the costs of special control to reduce exposure to asbestos; and costs associated with legal actions seeking compensation for asbestos-related illnesses and deaths. Finally, the estimated costs of this rule appear reasonable in view of the unreasonably large number of asbestos-related deaths and serious illnesses that would occur without a phase-out of asbestos.

EPA expects that this proposed rule would have a positive impact on technological innovation and encourage the continued rapid development of nonasbestos substitute products. This development of new products is likely to involve significant technological innovation.

IV. Other Options Considered

Section 6 of TSCA requires that EPA apply the least burdensome requirements to reduce an unreasonable risk. EPA is considering a number of options for implementing the regulatory policy of phasing out the manufacture and importation of asbestos products. These options involve staged bans of categories of asbestos products. This approach would ban the manufacture, importation, and processing of all

asbestos products within a certain category at the same time. EPA is considering a category approach for groups of asbestos products with similar exposure patterns, similar exposure control issues, and similar substitutes. Examples of categories under consideration are construction products and friction products. EPA believes it may be good public policy to ban categories of products at the same time. This approach would address similar exposure patterns in the same way and treat all parts of an industry sector similarly. In addition, both the construction products category and the friction products category contain products that could substitute for other products in the category if all are not banned. Thus, a ban of the entire category may be necessary to reduce risk most effectively.

One option under active consideration in addition to the ones embodied in the proposal is banning the manufacture, importation, and processing of the asbestos construction products category and asbestos clothing with the ban effective soon after promulgation of the rule; banning the manufacture, importation, and processing of the asbestos friction products category about 5 years after promulgation of the rule; and gathering up-to-date production, exposure, and use data on the remaining asbestos products under section 8(a) of TSCA to support possible bans of other asbestos products at that time. Another option is banning the manufacture, importation, and processing of the asbestos construction products category, asbestos clothing, and the asbestos friction products category as stated above and banning the remaining asbestos products at a later time (e.g., 10 years), thus allowing time for the development of effective substitutes while strongly encouraging substitute development. A third option is banning the manufacture, importation, and processing of the asbestos construction products category and asbestos clothing as stated above and covering all other asbestos products under the phase-down. Under each of the options, EPA is also considering a requirement that products not banned soon after promulgation be labeled as containing asbestos.

EPA is actively considering these options as alternatives to this proposed rule and specifically requests comment on these alternatives. EPA may adopt a final rule based closely on one or a combination of these alternatives. These alternatives are discussed more fully below.

1. *Ban the asbestos construction products category and asbestos clothing soon after promulgation of the rule, ban the asbestos friction products category about 5 years later, and gather additional information on other asbestos products.* Under this alternative, EPA would ban the manufacture, importation, and processing of the asbestos construction products category (i.e., asbestos-cement pipe and fittings, roofing felts, flooring felts and felt-backed sheet flooring, vinyl-asbestos floor tile, corrugated asbestos-cement sheet, flat asbestos-cement sheet, and asbestos-cement shingles) and asbestos clothing soon after promulgation of the rule. Effective substitutes exist for these products. The rule would also ban the manufacture, importation, and processing of the asbestos friction products category (i.e., drum brake linings, disc brake pads for light, medium, and heavy vehicles, brake blocks, clutch facings, automatic transmission friction components, and industrial and commercial friction materials) 5 years after promulgation of the rule. This alternative would reduce exposure to asbestos without the administrative burden of EPA establishing and operating a permit system as in the proposed approach. This alternative, by banning asbestos friction products 5 years after promulgation, would strongly encourage the rapid development of additional effective substitutes for asbestos friction products. The 5-year delayed ban would also allow time for expansion of production capacity for non-asbestos friction products.

EPA estimates that this alternative, assuming current exposure levels, would avoid about 2,100 cancer cases that EPA can quantify while costing about \$2.11 billion. This is a cost of about 1.01 million per cancer case avoided.

Because OSHA has proposed lowering the workplace PEL for asbestos to 0.2 f/cc, EPA also estimated the numbers of cancer cases avoided assuming strict compliance with this lower PEL. Assuming strict compliance with an OSHA PEL of 0.2 f/cc, EPA estimates that this alternative would avoid about 1,080 cancer cases that EPA can quantify, while costing about \$2.11 billion. This is a cost of about \$2.00 million per cancer case avoided.

To determine how sensitive the cost per cancer case avoided was to the banning of particular products, EPA conducted a sensitivity analysis, excluding asbestos-cement pipe from the ban.

Without a ban of asbestos-cement pipe and assuming strict compliance