

and potential net national economic effect on the industrial wipes market, our economic study included modeling the anticipated induced shift in respective wipes market share, resulting from direct cost savings and direct implementation cost pass-through on the respective wipes prices (*i.e.*, on wipes' life cycle usage costs, including costs of spent wipes disposal). In support of modeling induced market impacts, our economics study presents the findings of a meta-analysis of published own- and cross-price elasticity of demand coefficients, as applied in our study for purpose of simulating potential changes in wipes' market share. Our economic analysis also examined the potential composite outcome of direct and induced impacts of the solid waste exclusion on the industrial laundry industry, as suppliers of reusable industrial wipes.

Because we do not have exact information for every key data element applied, the economic study presents a sensitivity analysis over a "lower-bound," "most-likely," and "upper-bound" range in numerical values assigned to key baseline and exclusion compliance parameters, such as number of facilities using solvent wipes, percentage of solvent wipes not currently stored and transported in closed containers, percentage of solvent wipes generated which are not "dry" (*i.e.*, contain less than five grams solvent per wipe), price-elasticity of demand for industrial wipes, percentage of states which may adopt the proposed exclusions, and percentage of solvent wipes containers containing free liquids.

c. Impact Estimation Findings

The anticipated national net effect of the proposal is to provide the U.S. economy with \$28 million to \$72 million in average annual net benefits, consisting of four impact components: (1) \$13 million to \$20 million in annualized incremental cost for compliance with the conditions of the exclusions (*e.g.*, costs for purchasing accumulation and transportation containers for used industrial wipes); (2) \$40 million reduction in annual direct costs for RCRA regulatory compliance; (3) \$8 million to \$36 million per year in avoided air pollution from increase in capture of free liquid solvents from used industrial wipes; and (4) \$0.3 million to \$9 million per year in avoided fire damages to facilities from spontaneous combustion of solvent-contaminated industrial wipes. Compared to annualized implementation costs as a numerical ratio, the \$8 million to \$85 million in annualized total benefits

represent a benefit-cost ratio of 2.4 to 6.5. The annualized net benefits consist of \$33 million to \$37 million to generators for managing spent disposable industrial wipes and an uncertainty range of \$35 million in annual benefits to \$4 million in annual cost to generators managing reusable industrial wipes (depending upon the extent these costs may be shared with industrial laundries and the extent of reuse of captured solvents).¹⁹

The induced market impact simulated in the economic analysis estimates a potential 53% to 59% decrease in the life-cycle unit cost for using disposable industrial wipes (taking into account the cost of new wipes purchase plus spent wipes disposal), and a 0% to 17% increase in the effective unit cost of reusable wipes, associated with a potential induced reduction in reusable wipes' national market share of 3% to 15% for the fraction of the industrial wipes market potentially affected by the exclusions.

3. Economic Impact of Today's Other Proposed Exclusion Options

For the reasons explained below and in the "Economics Background Document," we did not prepare a separate quantitative estimate of each of the following alternative options, because they are expected to fall incrementally within or near the impact estimation range for the main option. Below we describe the potential impacts of each of these options in qualitative terms.

a. Exclusion From the Definition of Hazardous Waste for Disposable and Reusable Solvent-Contaminated Industrial Wipes

This option would exclude both disposable and reusable solvent-contaminated industrial wipes from the definition of hazardous waste instead of making a distinction between the types of wipes and excluding disposable industrial wipes from the definition of hazardous waste while excluding reusable solvent-contaminated industrial wipes from the definition of solid waste. No aspect of the proposed rule would change for generators and handlers of disposable wipes. Generators and handlers of reusable solvent-contaminated wipes would be managing a solid waste under this option, but would be subject to the same

conditions as those proposed today for the exclusion from the definition of solid waste and, therefore, anticipated net cost savings for this option would remain the same relative to the main option proposed today.

b. Exclusion for All Disposable Solvent-Contaminated Industrial Wipes Under a Single Set of Conditions

This option would not differentiate between disposable wipes managed at a landfill compared to a non-landfill facility. Disposable solvent-contaminated wipes would be excluded from hazardous waste regulations provided the wipes were stored in covered containers while on site, and as long as the wipes do not contain free liquids prior to sending them off site in closed containers that are marked "Excluded Solvent-Contaminated Wipes."

Under this option, greater regulatory relief would occur for generators of disposable industrial wipes relative to the main option because (1) they would not have to meet the "dry" condition that is proposed under our main option and (2) they would not have to worry about the types of solvent they used. Therefore, some number of generators would not have to spend additional resources to meet this "dry" condition (relative to the "no free liquids" condition), or switch to other solvents if they so desired to manage their wipes in a municipal or other non-hazardous waste landfill.

B. Paperwork Reduction Act

The information collection requirements in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* The Information Collection Request (ICR) document prepared by EPA has been assigned EPA ICR number 2127.01.

The information requirements established for this action, and identified in the Information Collection Request (ICR) supporting today's proposed rule, are largely a self-implementing process. This process would ensure that: (i) Handlers of solvent-contaminated industrial wipes are held accountable to the proposed requirements of the conditional exclusions; and (ii) inspectors can verify compliance when needed. For example, the proposal would require that solvent-contaminated industrial wipes contain no free liquids prior to being transported off site by generators for subsequent management. The conditions would also require

¹⁹ EPA's cost estimates assumed that generators would transport solvent-contaminated wipes to laundries in closed containers despite the proposed performance standard. If industry can find cheaper methods of meeting the performance standard, the costs of reusable wipes management will be less than this estimate.