

promulgation to ensure compliance with the final rule requirements, and we adjusted the appropriate cost estimated in the ICR to reflect this.

E. Calculation of Organic HAP Emission Reduction

As part of a compliance demonstration, an owner or operator of an affected source has to calculate the organic HAP emission reduction for operations with add-on capture and control systems. The equation used to calculate the emission reduction achieved with such systems in the proposed rule decreased the overall control efficiency to account for time periods when there were deviations. Using time periods alone to account for periods of deviations assumes essentially steady-state operations over the compliance period, with little variation in the quantity of coating materials used or their HAP content. While steady-state conditions may occur at some operations, others may use different quantities of coating materials or materials with different HAP content. To allow flexibility for operations that could vary over time, we have revised

the equation to determine overall control efficiency.

The terms associated with the total time period of deviations (T_{dev}) and coating operations (T_{op}) that were in the proposed Equation 1 do not appear in Equation 1 of § 63.3541 of the final rule. Instead, Equation 1 of the final rule includes a term H_{unc} to represent the total mass (kg) of organic HAP in the coatings, thinners, and cleaning materials used during periods of deviations. In addition, the final rule allows a source to demonstrate that some level of control efficiency may be achieved during periods of deviations (*i.e.*, the efficiency of emission reduction is not necessarily zero during malfunctions) by showing sufficient supporting information. Two additional equations related to Equation 1 have been included to calculate total mass of organic HAP in cleaning materials and total mass of organic HAP used during periods of deviations.

IV. Summary of Environmental, Energy, and Economic Impacts

The final rule will affect 142 existing major source metal can surface coating facilities. The impacts are presented

relative to a baseline reflecting the level of control prior to the final rule. Because of consolidation in the metal can surface coating industry, we do not expect there to be any net growth within the industry in the next 5 years. Therefore, the estimate of the impacts of the final rule is presented for existing facilities only. For a facility that would already be in compliance with the emission limits in the final rule, only MRR cost impacts were estimated. For more information on how impacts were estimated, *see* the BID for the final rule (EPA-453/R-03-009).

A. What Are the Air Impacts?

We estimated that compliance with the emission limits in the final rule will reduce nationwide organic HAP emissions from existing major affected sources by approximately 6,160 Mg/yr (6,800 tpy). That represents a reduction of 70 percent from the baseline organic HAP emissions of 8,700 Mg/yr (9,600 tpy). Table 5 of this preamble gives a summary of the primary air impacts for major coating segment groupings associated with implementation of the final rule.

TABLE 5.—SUMMARY OF PRIMARY AIR IMPACTS BY SUBCATEGORY OR COATING SEGMENT FOR EXISTING SOURCES

Subcategory or coating segment	Emissions before NESHAP, Mg/yr (tpy)	Emissions after NESHAP, Mg/yr (tpy)	Emissions reduction, Mg/yr (tpy)	Percent reduction
Two-piece D&I beverage can body coating.	4,468 (4,922)	1,644 (1,811)	2,824 (3,111)	63
Two-piece D&I food can body coating.	765 (843)	139 (153)	626 (690)	82
One-piece D&I aerosol can body coating.	16 (18)	16 (18)	0 (0)	0
Sheetcoating	2,289 (2,522)	404 (445)	1,885 (2,077)	82
Three-piece food can assembly coating.	370 (408)	285 (314)	85 (94)	23
Three-piece nonfood can assembly coating.	45 (50)	38 (42)	6 (7)	14
End coating	763 (841)	34 (38)	729 (803)	95
Total	8,718 (9,603)	2,560 (2,820)	6,158 (6,783)	70

B. What Are the Cost Impacts?

Cost impacts include the costs of recordkeeping and reporting, capital equipment costs, performance testing costs, monitoring equipment costs, and material costs as facilities comply with the final rule. Recordkeeping and reporting include all labor hours related to the tracking of coating usage, the cost of purchasing computer equipment, the labor hours required to write and submit reports, and the labor hours required to train personnel. Capital equipment costs for the facilities that choose to use capture equipment and add-on control devices to comply with the final rule include costs for the purchase,

installation, and operation of the equipment. Performance testing costs for the facilities that choose to use add-on control devices to comply with the final standards include the labor hours required for a contractor to conduct performance testing on each control device used, and to develop the associated reports for recordkeeping and reporting purposes. Monitoring equipment costs include the purchase of thermocouples, pressure sensors, and data loggers and the installation of equipment.

Material costs include the cost of switching to low- or no-HAP coatings. For facilities that choose to use low- or

no-HAP coatings to comply with the final standards, coatings with lower-HAP content are assumed to be more expensive than coatings with higher-HAP content. According to information received from industry, we assumed the incremental cost increase to be \$2.00 per gal for inside sprays and \$5.00 per gal for side seam stripes, which are used in three-piece food can assembly and three-piece nonfood can assembly subcategories; and \$2.00 per gal for nonaseptic end seal compounds, which are used in the end coating subcategory. These incremental costs are the estimated additional costs that each