

TABLE 29.—ITEM COST ESTIMATES FOR CONTROL REQUIREMENTS IN CONSTRUCTION—Continued

Item	Unit cost (in 1984 dollars)	Comments used to develop estimates
Exposure monitoring:		
Sampling.....	300.00/technician/day	Exhibits 84-473, 84-474, 179, 312A, 256 and 272; and hearing transcript of July 11, 1984, pages 89, 92, 137 and 185-192, and June 29, 1984 page 117.
Analysis.....	30.00/per sample	
Medical exams.....	100.00/per exam	Exhibits 84-473, 84-474, 123A, 256 and 272; and hearing transcript of July 2, 1984, pages 52 and 253, and June 29, 1984, page 117 and 204.
Training.....	Varies with type and duration of training.	Exhibits 84-473 and 84-474; hearing transcript of June 20, 1984, page 179; June 29, 1984, page 201 and July 11, 1984, page 89.

Source: U.S. Department of Labor, OSHA, Office of Regulatory Analysis.

OSHA's annual compliance cost estimate of \$45.4 million for routine maintenance in general industry was developed based on the assumption that due to economies of scale, over 76,000 establishments would hire contract labor to perform activities such as the removal and installation of asbestos insulation and gaskets. Thus, although the total costs in this sector may appear large, the estimated average compliance cost to each establishment is less than \$600 per year. Costs of this magnitude are clearly affordable.

According to the 1982 Census of Construction Industries, receipts for SIC 1795, Wrecking and Demolition, were \$376.9 million (1982 dollars). Given the estimated annual compliance costs of \$13.8 million (1984 dollars), the cost-to-revenue ratio in this sector is approximately 3.6 percent. Based upon this estimate, it appears that the demolition sector may have financial difficulty complying with the requirements of the revised standard. Demolition activity, however, is frequently associated with new construction and it is likely that any compliance cost increase for this segment of the construction industry will be shifted forward to the buyer.

Economic Impact and Regulatory Flexibility Analysis

Introduction

According to the RTI report, "An accurate assessment of the actual impacts depends on the supply and demand conditions facing each sector" [Exhibit 84-473, p. 52]. If an industry is characterized by inelastic demand, for example, then the industry can afford relatively high compliance costs (compared to revenues) because these costs can be passed on to consumers. Conversely, if an industry is characterized by an elastic demand and low profits, then it may not be able to afford even small increases in costs. In order to account for these factors,

therefore, OSHA developed a partial equilibrium demand-supply model.

OSHA used the industry compliance cost estimates developed in the previous section, together with reasonable estimates of demand and supply elasticities, to examine the probable economic impacts of the revised standard on the affected industry groups. Impacts on the primary and secondary manufacturing sectors were derived from the Agency's demand-supply model. Impacts on the service industries and construction sectors were based on the methodology presented in the CONRAD report [Exhibit 84-474, Chapter 5] and on estimates of the economy's demand for the repair and construction services offered by these industries.

The application of this economic modeling indicates that the direct compliance costs of the standard, after accounting for new output levels, will be approximately \$453.5 million per year. The compliance costs for each major industry group are estimated to be \$27.3 million for primary manufacturing; \$29.2 million for secondary manufacturing; \$3.9 million for ship repair; \$44.6 million for automotive repair; and \$348.5 million for construction. Since these estimates account for the changes in output that the new standard will cause, they are technically more accurate than the estimates of total compliance costs (presented in the previous section) based on current output levels.

In order to estimate the total cost of the standard to the U.S. economy, OSHA added the excess burden (or dead weight loss) of the revised standard to the estimates presented above. The dead weight loss represents the lost value to buyers and sellers due to transactions that are currently taking place but will no longer take place after the implementation of the revised standard. For example, if the buyer formerly purchased 1,000 sheets of a product, those 1,000 sheets represent a value to the buyer at least as great as the price paid. If, as a result of a higher

product price due to the revised standard, only 600 sheets are bought, then the buyer loses the benefit formerly received on 400 sheets. This is a loss to the buyers but it is a gain to no one (i.e., a dead weight loss to the U.S. economy). The sum of the direct compliance costs and the dead weight losses is the total social cost of the new standard (assuming negligible displacement costs). OSHA estimates that the dead weight loss will be approximately \$1.7 million per year and the total annual social cost of the new regulation will be \$455.2 million.

Primary and Secondary Manufacturing

Economic Impacts. In order to examine the effects of the regulation on producers of asbestos-containing products, OSHA calculated not only the compliance costs borne by suppliers but also the percentage change in profits of suppliers. This information is presented in Table 30. It is important to recognize that a decline in profit from manufacturing an asbestos-containing product does not translate into an identical decline in profit to the firm. Many asbestos producers also manufacture non-asbestos substitute goods, and, increased demand for these substitutes will partially offset declines presented in Table 30. For example, most automotive brake rebuilding shops can use non-asbestos parts. If a brake remanufacturing shop anticipates losses of \$20,000 per year in profits as a result of the new asbestos standard, it could substitute non-asbestos brake parts. Thus, the results presented in Table 30 reflect the extent to which the manufacturing of asbestos products becomes more or less attractive to firms. It does not predict the complete effect on the profitability of firms switching to non-asbestos products.

As can be seen from Table 30, the model predicts that most of the sectors will experience only small changes in profits due to compliance with the provisions of the revised standard. In three sectors (i.e., primary A/C pipe, primary flooring, and secondary A/C sheet) profits are expected to increase due to a decline in the price of inputs, and in nine other sectors profits are expected to decline by less than 6 cents on the dollar. In only 3 out of the 15 modeled sectors (i.e., primary A/C sheet and friction products manufacturing and secondary asbestos gasket manufacturing) are profits expected to decline significantly.