

## BILLING CODE 4510-26-C

*D. Benefits*

The benefits that would accrue to respirator users and their employers take several forms. The proposed standard would benefit workers by reducing their exposures to respiratory hazards. Improved respirator selection would augment previous improvements to the Respiratory Protection Standard, such as better fit-test procedures and improved training, contributing substantially to greater worker protection. Estimates of benefits are difficult to calculate because of uncertainties regarding the existing state of employer respirator-selection practices and the number of covered work-related illnesses. At the time of the 1998 revisions to the Respiratory Protection Standard, the Agency estimated that the standard would avert between 843 and 9,282 work-related injuries and illnesses annually, with a best estimate (expected value) of 4,046 averted illnesses and injuries annually (63 FR 1173). In addition, OSHA estimated that the standard would prevent between 351 and 1,626 deaths annually from cancer and many other chronic diseases, including cardiovascular disease, with a best estimate (expected value) of 932 averted deaths from these causes. The APFs proposed in this rulemaking help ensure these benefits are achieved, as well as provide an additional degree of protection. The proposed APFs would reduce employee exposures to several section 6(b)(5) chemicals covered by standards with outdated APF criteria, thereby reducing exposures to chemicals such as asbestos, lead, cotton dust, and arsenic.<sup>5</sup> While the Agency did not quantify these benefits, it estimates that 29,655 employees would have a higher degree of respiratory protection under the proposed APF standard. Of these employees, an

estimated 8,384 have exposure to lead, 7,287 to asbestos, and 3,747 to cotton dust, all substances with substantial health risks.

In addition to health benefits, OSHA believes other benefits would result from the harmonization of APF specifications, thereby making compliance with the respirator rule easier for employers. Employers also would benefit from greater administrative ease in proper respirator selection. Employers would no longer have to consult several sources and several OSHA standards to determine the best choice of respirator, but could make their choices based on a single, easily found regulation. Some employers who now hire consultants to aid in choosing the proper respirator should be able to make this choice on their own with the aid of the proposed rule. In addition to having only one set of numbers (*i.e.*, APFs) to assist them with respirator selection for nearly all substances, some employers may be able to streamline their respirator stock by using one respirator class to meet their respirator needs instead of several respirator classes. The increased ease of compliance would also yield additional health benefits to employees using respirators.

The proposed APFs would clarify when employers can safely place employees in respirators that impose less stress on the cardiovascular system (*e.g.*, filtering facepiece respirators). Many of these alternative respirators may have the additional benefit of being less expensive to purchase and operate. As previously discussed, OSHA estimates that over 15,000 employees currently use respirators that would fall in this group (*i.e.*, shift to a less expensive respirator).

*E. Economic Feasibility*

OSHA is required to set standards that are feasible. To demonstrate that a standard is feasible, the courts have held that OSHA must "construct a reasonable estimate of compliance costs and demonstrate a reasonable likelihood that these costs will not threaten the existence or competitive structure of an industry" (*United Steelworkers of America, AFL-CIO-CLC v. Marshall* (the "Lead" decision), 647 F.2d 1189 (DC Cir. 1980)).

OSHA conducted its analysis of economic feasibility on an

establishment basis. Accordingly, for each affected industry, the Agency compared estimates of per-establishment annualized compliance costs with per-establishment estimates of revenues and per-establishment estimates of profits. It used two worst-case assumptions regarding the ability of employers to pass the costs of compliance through to their customers: The no-cost-pass-through assumption, and the full-cost-pass-through assumption. Based on the results of these comparisons, which define the universe of potential impacts of the proposed APFs, OSHA then assessed the proposal's economic feasibility for all affected establishments, *i.e.*, those covered by the proposal.

The Agency assumed that establishments falling within the scope of the proposal would have the same average sales and profits as other establishments in their industries. OSHA believes this assumption is reasonable because no evidence is available showing that the financial characteristics of those firms with employees who use respirators are different from firms that do not use respirators. Absent such evidence, OSHA relied on the best available financial data (those from the Bureau of the Census (Ex. 6-4) and Robert Morris Associates (Ex. 6-5)), used a commonly accepted methodology to calculate industry averages, and based its analysis of the significance of the projected economic impacts and the feasibility of compliance on these data.

The analysis of the potential impacts of the proposed APF standard on before-tax profits and sales shown in Table VI-5 is a "screening analysis," so called because it simply measures costs as a percentage of pre-tax profits and sales under the worst-case assumptions discussed above, but does not predict impacts on these before-tax profits or sales. OSHA used the screening analysis to determine whether the compliance costs potentially associated with the proposed standard could lead to significant impacts on all affected establishments. The actual impact of the proposal on the profit and sales of establishments in a specific industry would depend on the price elasticity of demand for the products or services of these establishments.

<sup>5</sup> In the 1998 rulemaking revising the Respiratory Protection Standard, the Final Economic Analysis noted that the standard would not directly affect the benefits for the estimated 5% of employees who use respirators under OSHA's substance-specific health standards (except to the extent that uniformity of provisions improve compliance). Therefore, the Agency likely over-estimated the benefits of that rulemaking since the standard did not affect directly the type of respirator used by those employees (63 FR 1173). Conversely, this proposed rulemaking directly addresses the APF provisions of the substance-specific standards; therefore, this proposal would affect directly the respirators used by employees covered by these standards.