

Existing section (29 CFR 1926)	Proposed action (29 CFR 1926)
60(i)(3)(i)	Remove Table 1 and revise.
62(f)(3)(i)	Remove Table 1 and revise.
1101(h)(3)(i) through (h)(3)(iv).	Remove Table 1 and revise.
1127(g)(3)(i)	Remove Table 1 and revise.

Section XII ("Proposed Amendments to Standards") of this notice provides the full regulatory text of the proposed revisions to OSHA's existing substance-specific standards dealing with respirator selection. This section describes both substantive revisions proposed for the existing respirator-selection requirements, as well as respirator-selection requirements retained in their current form but rewritten in plain language.

VIII. Issues

OSHA requests the public to comment on, and to provide additional information regarding, any of the issues listed below. Please provide a detailed explanation of each response you make.

Developing and Updating APFs

1. Is the method used by OSHA in developing the proposed APFs appropriate? OSHA used a multi-faceted approach incorporating both analyses of data collected in WPF and SWPF studies, as well as OSHA's review of all relevant materials. OSHA requests comment on the usefulness of this approach to data collection.

2. Are there any additional studies that may be useful in determining APFs, that have not already been identified by OSHA in Section IV of this proposal? Please provide these to the Agency.

3. Are statistical analyses, treatments, or approaches, other than those described in Section IV of the proposal, available for differentiating between or comparing the highly variable respirator-performance data?

4. OSHA is aware of discussions within the respirator community indicating some sentiment for setting APFs for filtering facepiece respirators at 5, and for setting an APF of 10 for other half-mask air-purifying respirators. Based upon OSHA's reviews, OSHA cannot differentiate between the performance of the two types of respirator, and OSHA finds compelling evidence from the large number of observed data points (N = 917 Co/Ci pairs) to support proposing an APF of 10 for both of these classes of respirators. Is there evidence that a

different APF should be provided for these respirator classes?

5. While there are no WPF or SWPF studies for quarter-mask respirators, the 1976 LANL Respiratory Protection Factor by Hyatt found protection factors ranging from 5 to 10. Should OSHA continue to include quarter-masks in the half-mask class, or separate them into a class of their own with and APF of 5?

6. OSHA is proposing a method by which to separate loose-fitting facepiece supplied-air and PAPR hood/helmet respirators from the better-performing hood/helmet respirators. Respirator performance studies have shown that some PAPR and continuous-flow supplied-air respirators provide greater protection than others of the same class. The 1987 NIOSH Respirator Decision Logic gives an APF of 25 for all of these respirators while ANSI's 1992 respirator standard gives an APF of 25 to loose-fitting facepiece models and an APF of 1000 to hood/helmet models. OSHA is proposing an APF of 25 except for those models that ensure the maintenance of a positive pressure inside the facepiece during use, consistent with a protection factor of 1000 or greater, in which case those models would receive an APF of 1000. Is this the appropriate method by which to distinguish high-performing hood/helmet respirators from others?

7. The assigned protection factor for a full facepiece respirator in Table 1 of the proposed standard does not currently take into account the type of particulate filter that is used. An N95 particulate filter could potentially, under a worst case scenario, have up to 5% leakage through the filter. This would decrease the APF for a full facepiece respirator to a maximum of 20 when N95 filters are used. Should OSHA take into account the limitations of the filter and assign an APF of 20 for full facepiece respirators when N95 filters are used?

8. Other Federal Agencies, such as the Nuclear Regulatory Commission (NRC), have set no APF for filtering facepiece air-purifying respirators (APRs) for use in their particular work environments. In some cases, such APRs are not allowed to be used at all. In other settings, e.g., the healthcare industry, some employers rely very heavily upon such APRs to protect their employees who work with patients who have infectious airborne illnesses. How should OSHA incorporate such information, if at all, into an APF requirement for all industries under OSHA's jurisdiction?

9. Proper facepiece fit is important in achieving the proposed APF for tight-fitting respirators. Accordingly, the Agency would appreciate receiving information on current testing and

procedures used by respirator manufacturers to ensure that the facepieces they make will fit respirator users properly.

10. When a limiting factor such as IDLH, LEL, or the performance limit specified for a cartridge and canister by the manufacturers are less than the calculated MUC, proposed paragraph (d)(3)(i)(B)(4) requires employers to set the MUC at the lower limit. Accordingly, OSHA is seeking comment on the following questions:

a. What other limiting factors should OSHA include as examples in this proposed paragraph?

b. Should the Agency specify the LEL or 10% of the LEL as the limiting factor?

11. Some hazardous substances found in the workplace do not have an OSHA PEL. However, a number these substances may have an exposure limit designated by sources other than OSHA (e.g., recommended by the chemical manufacturer, ACGIH, NIOSH, EPA). Accordingly, the Agency is asking for comment on the following issues involving MUCs:

a. Should OSHA expand the definition and application of MUC to hazardous substances that it does not regulate?

b. Should the Agency require employers to determine MUCs for substances that have no OSHA PEL (i.e., substances not regulated specifically by OSHA), and to base respirator selection on such a determination?

c. For hazardous substances that OSHA does regulate, should it require employers to comply with the MUC values developed by NIOSH when these values are lower than the calculated MUC values (i.e., $MUC = APF \times PEL$)?

12. A prevailing view is that exposure to multiple contaminants in the workplace affect the performance of respirator filters and cartridges differently than exposure to single contaminants. To assist it in developing MUCs for single and multiple contaminants, OSHA is asking the public to address the following issues:

a. What information and data are available that either support or do not support this view?

b. Should MUCs for contaminant mixtures differ from MUCs for single mixtures?

13. Section VII proposes to revise most of the respirator-selection requirements in OSHA's substance-specific standards. Accordingly, the Agency is asking for comment on the following questions:

a. This proposal excludes the respirator-selection provisions of the 1,3-Butadiene Standard from any revision. Is this exclusion warranted?