Racal Health & Safety

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Oral Presentation - NIOSH Public Meeting, June 6th

Thank you for the opportunity to present our views on the next step in updating the NIOSH regulations on respirator certification.

Racal believes modules should be ranked according to how they affect worker safety. We agree with using the criteria listed in the Federal Register Notice. These criteria include examining the number of workers affected, the industries affected, and the extent to which changes would improve worker protection. Other criteria that should be used for prioritizing modules are expediency by which a change can be implemented, and the opportunity for cost savings to the end user.

We believe that the modules which most affect worker safety are the PAPR module and Administrative / QA module in that order. The PAPR module has a high priority because it is currently tested to outdated requirements (30 CFR 11) and is only limited to HEPA products. By carrying-over the N-R-P categories to PAPRs, all particulate filters would be tested using current technology. The PAPR module has a direct effect on ensuring worker safety because new, improved respirators would be available for users to choose from.

The rationale for a PAPR module is:

1.   there are a large number of industries and workers affected,

2.   respirator selection would be enhanced,

3.   the current status of PAPRs in 42 cfr 84 is unfinished,

4.   the PAPR module is technically feasible and should be aligned with N-R-P classes of negative pressure respirators.

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1)   Industries and Workers Affected

- The PAPRs on today's market encompass a broad range of products used in many industries. Some of these industries include Pharmaceutical, Chemical, Healthcare, Metal Processing, and Transportation Industry. We estimate that there are over a half a million workers using PAPRs.

- The range of filters on PAPRs include dust, dust/mist, dust/mist/fume and HEPA. All categories except HEPA were eliminated in 42 CFR 84. These products will no longer be available from manufacturers after July 1998 thus limiting the choice of respirators.

- There is a great diversity of headpieces used on PAPR systems. Headpieces fall into two broad categories: tight-fitting facepiece and loose-fitting facepieces. Tight-fitting facepieces include full facemasks and half masks. Loose-fitting facepieces include hoods, helmets, and faceshields.

- Taking all these variables into account, a large number of respirators and users are affected by any changes in the regulation.

2) Respirator Selection

- Worker safety is promoted by updating the quality of respirators. Particulate requirements for PAPRs should be increased in line with the increase in APRs.

- Advancements in PAPR technology could provide more diverse selection of respirators to protect worker in different applications.

- Avoid end user confusion when selecting respiratory protection. This can be accomplished by applying the N-R-P terminology to PAPR filters.

- PAPRs provide enhanced comfort because there is no additional pulmonary stress on the wearer. Products with a high degree of comfort are more likely to be worn, will encounter less resistance from the worker, and facilitate administering a comprehensive respiratory protection program.

- PAPRs provide program administrators enhanced health and safety options by accommodating facial hair and facial deformities.

3)   Current Status of PAPRs in 42 CFR 84

- Promulgation of 42 CFR 84 separated PAPRs from negative pressure respirators. This was necessary because particulate filters on negative pressure respirators and PAPRs could not be tested in the same way. Therefore, filter requirements on APRs were updated to reflect current filter technology while filter requirements of PAPRs were unchanged.

- PAPRs are currently tested to outdated requirements (those that were contained in 30 CFR 11).

- New PAPR certifications can only be made with a HEPA filter. Product development and product enhancements are limited by an incomplete certification standard (42 cfr 84 does not accommodate N-R-P categories for PAPRs).

- Grandfathering provisions of 42 CFR 84 eliminates whole categories of PAPRs. The grandfathering period ends July 1998. At this time, whole categories of PAPRs will not be available to the end user. The categories being eliminated are dust, dust/mist, and dust/mist/fume. Employers will incur unnecessary costs as they be forced to replace their PAPRs with N-R-P respirators or upgrade to a HEPA-based PAPR. Note that some employees may be unable to wear a negative pressure respirator due to a fit, health, or application limitations.

4) **Technical Feasibility / Expediency for Implementing Change**

- PAPRs were included in the original filter performance module of 42 CFR 84. They were removed after realizing that the test for particulate APRs could not be applied to PAPRs. An adjustment for PAPR filter testing is therefore necessary.

- APR filter testing should be the foundation for developing PAPR filter testing. Some modifications to the test parameters will be necessary. We would strive to utilize modified existing test methodologies rather than introduce new test methods.

- There are new developments in test equipment that accommodate the PAPR performance characteristics.

- Additionally, PAPRs can be configured to meet any appropriate protection factor desired.

Administrative / QA

Racal Health & Safety supports a review of the administrative aspects of respirator testing and certification. This should result in greater expediency in processing applications and certifying respirators. The administrative module indirectly affects worker safety because the process for testing, certifying and auditing respirators would be improved. We support the incorporation of ISO9000 Quality Standards by manufacturers and NIOSH. This will relieve some of the documentation requirements of the current submittal process. NIOSH must retain total responsibility for respirator certification. However, Racal believes if repeatable test protocols are developed, third party testing could be used to allow all testing to be completed by manufacturer through a certified third party laboratory and submitted to NIOSH with the application. This would speed up the approval process by relieving the testing at NIOSH. These test facilities should be ISO certified and audited by NIOSH on a regular basis to ensure consistency of approach.

In summary, Racal believes that the most important module is the one addressing PAPRs. Under the Administrative / QA module, NIOSH has the opportunity to adopt creative, yet well-established approaches to be more efficient while maintaining control of certification. We will provide more details in our written comments. Thank you for your time.