



**SURVIVAIR®**

July 21, 1994

NIOSH Docket Office  
Robert A. Taft Laboratories  
Mail Stop C34  
4676 Columbia Parkway  
Cincinnati, OH 45226

Please find attached Survivair's comments regarding 42CFR84. We appreciate the opportunity to comment.

Sincerely,

Richard L. Stein, Ph.D.  
International Manager - Technology

RS/jr

cc: Jack Bell

STATEMENT FROM SURVIVAIR REGARDING  
THE PROPOSED RULE ON RESPIRATORY PROTECTIVE DEVICES (42CFR84)

One of NIOSH's goals in changing 30CFR11 to 42CFR84 was to ... "Enable users to easily discern the level of protection that can be expected when using a respirator."

42CFR84, as proposed by NIOSH, allows the certification of respirators using six classes of particulate filters, three labeled as "liquid and solid" and three labeled as "solid." The nature of the test parameters is such that filters can meet the "solid" requirement with use of less costly media than that for "liquid and solid." These filters would have the same efficiency label as the equivalent liquid and solid classification, but NIOSH has demonstrated that some of these types of filters will degrade with use. Thus, it is possible under the proposed 42CFR84 certification scheme to have filters which appear to offer the same level of continuous protection, but in fact, may not offer the same level of continuous protection. NIOSH plans on publishing a guideline document regarding use. We assume OSHA will also try to enforce some level of use on the user community. Nevertheless, we believe NIOSH will have left open a clear path to foreseeable misuse of these products. The electrostatic "solid only" filters will probably be much less expensive to purchase. The confusion over classifications, lack of understanding of solid and liquid vs. solid, lack of knowledge about the type of particulate in the workplace, and the perceived economic benefit of purchasing less expensive filters, may all lead to improper use of particulate filters.

NIOSH could eliminate the problem by certifying respirators utilizing the "solid and liquid" requirements only. Users would have 3 choices of filters, but not have to worry about 1) the kind of particulate that is present in the air, 2) how to read and interpret a complicated set of manufacturer's warnings, 3) establishing complex training, and 4) setting up surveillance to ensure that the correct filters were always used.

NIOSH may be unnecessarily complicating the use of respirators. Complication leads to end user confusion and misuse. NIOSH should reconsider this issue.

Furthermore, NIOSH should evaluate one technical change to the "liquid and solid" test parameters. At present, testing will stop when 200 mg. total DOP reaches the filter (100 mg. for each of a pair of filters). This test should be carried out until a filter shows no degradation with aerosol challenge. Certifying a respirator that allows a filter to continuously degrade in actual use when the user is unable to detect this continuous change in filtration efficiency may be contradictory to one of NIOSH's stated goals which is to "...Enable classification of filters on their ability to inhibit penetration of particulates of the most penetrating size."

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