



E. I. DU PONT DE NEMOURS & COMPANY  
INCORPORATED  
WILMINGTON, DELAWARE 19898

RECEIVED  
1987 DEC 24 AM 10: 23  
NIOSH

LEGAL DEPARTMENT

December 23, 1987

VIA OVERNIGHT MAIL

Docket Office  
NIOSH Docket Office Mail Stop E-23  
1600 Clifton Road  
Atlanta, Georgia 30333

Dear Sir or Madam:

On August 27, 1987, the National Institute for Occupational Safety and Health (NIOSH) published in 52 Federal Register 32313 a Notice of Proposed Rulemaking for Testing and Certification of Respirators for Use in Mines (hereinafter NPRM). In the NPRM, NIOSH has proposed new regulations for respirator certification (42 CFR Part 84) which will replace the existing regulations under 30 CFR Part 11. The proposed regulations are substantially different from the present certification procedures. E. I. du Pont de Nemours and Company (Du Pont) believes that promulgation of the proposed regulation will have a negative impact on the health and safety of the employees that the regulation is intended to protect. Accordingly, Du Pont hereby submits the following comments on the Notice of Proposed Rulemaking.

First of all, the proposed regulations limit certification to respirators used only in the mining industry. Du Pont believes this limitation is inappropriate since the majority of workers who use respirators are found in other industries which have working conditions totally different from those found in mining. We believe it is more appropriate to have certification procedures which are related to conditions found in the majority of workplaces and not procedures limited to only those conditions present in mining.

Secondly, the proposed regulations change existing test procedures for filters and cartridges. Some of the changes, such as improving the methods for determining particle penetration, are an improvement over the old procedures which required testing with particulates that were not related to the modern workplace, i.e., the lacquer mist test. Another improvement is the classifying of respirator filter media by efficiency. This will allow the person responsible for the selection of respirators to choose a filter media which is more appropriate for the particular work situation.

- 2 -

However, the performance requirements for testing filters against a liquid oil and solid aerosol will eliminate an entire class of filter media, the electrostatic type, which is an important factor in respirator comfort. The electrostatic filter media is characterized by having a low breathing resistance. Since respirator comfort is one of the main factors that enhances use of a respirator by an employee, we believe NIOSH should consider the recommendations of the Industrial Safety Equipment Association (ISEA) and the American National Standard Institute (ANSI), which requested separate approvals for filters that will be used against liquids or solids.

With respect to the proposed test procedures for organic vapor cartridges, specifically testing with an equilibrated cartridge at 85% relative humidity, we believe this is not in the best interest of the employees who will need to use this equipment. It has been our experience that the current test protocol is adequate to demonstrate that the cartridge has a given loading of charcoal. The proposed test requirement will result in an increased weight of charcoal to be used in the cartridges. In addition, the increased charcoal will effect the fit and comfort of the respirator as well as employee safety.

A new concept added to this proposal is the sizing of respirators based upon fitting tests with a panel. The data we collected during the development of the isoamyl acetate fit test was examined to determine whether a correlation existed between fit and face size. We found no such relationship. We believe it is inappropriate and a dangerous precedent to require a size range to be put on face pieces. Employee safety and health is at risk under this concept due to the implication that a worker could get an improper fit with a certain respirator without an actual fit test being conducted.

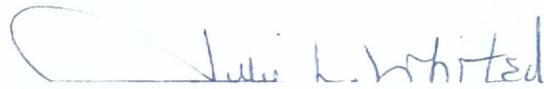
Finally, the most sweeping change in the proposal is a requirement to perform simulated or workplace studies. NIOSH has not published the test protocols for comment. Du Pont has been one of the few organizations that have actually conducted such testing. These tests are extremely difficult to perform and are still only research tools. No protocols or general methods have been accepted by the industrial hygiene community at present. Therefore, we believe it is premature to require such tests at this time.

In general, Du Pont supports the ISEA position that NIOSH recall the proposed regulation until such test protocols have been developed. We support a position that NIOSH work with the Occupational Safety and Health Administration (OSHA), the Mine Safety and Health Administration (MSHA), and members of the public to develop effective methods of performance testing for respirators.

- 3 -

Du Pont appreciates this opportunity to offer comments on this rulemaking and requests that they be considered by the National Institute for Occupational Safety and Health and entered into the docket in this proceeding.

Very truly yours,



Julie L. Whited  
Senior Legal Assistant

JLW:2.0012

cc: James T. Williamson, Esq. -- Du Pont Co.  
Thomas J. Nelson -- Du Pont Co.  
Steve Dixon -- Du Pont Co.  
Leon C. Schaller -- Du Pont Co.