

November 17, 1977

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National Institute of Occupational  
Safety and Health  
Regulations Assistant, NIOSH  
Room 8-11  
5600 Fishers Lane  
Morganville, MD 20857

Dear Sir:

The Los Angeles City Fire Department is deeply concerned with the current federal regulations for testing procedures and approval criteria relative to respiratory protective systems available to the fire service. As currently written, the NIOSH/MESA joint testing and approval program for occupational respiratory protective systems, under the provisions of 30 CFR, Part 11, are overly restrictive and border on reinforcing monopolistic control by certain manufacturers of respiratory protective systems that are available to the fire service.

The Los Angeles City Fire Department, since the early 1950's, has provided for and supervised the mandatory use of respiratory protective devices for all of its fire suppression personnel. Given our extensive history in the use of respiratory protective devices, I feel the problems encountered by this Department are typical and very representative of many of the problems confronting Fire Departments in general.

Our concerns center around two major areas:

1. The prohibition against substitution of technical components of different yet compatible breathing apparatus systems coupled with the restrictiveness of approval procedures sponsors monopolistic control by major manufacturers. They are the only



- companies that can spend the time and money necessary to obtain the testing and approval for mechanical components.
2. Current federal regulations do not give enough consideration to interchangeability of component parts. This directly affects procurement procedures and fire service mutual aid agreements. Several fire agencies can be involved with the handling of a major emergency necessitating exchange of breathing apparatus components; i.e., bottles, face masks, etc. As procurement procedures require competitive bidding, it is not unusual for a large Fire Department to have several major brands of respiratory protective devices in use. This situation is even more serious when jurisdictions become involved in joint purchase agreements in an effort to make the most effective use of tax dollars. Latitude, therefore, must be given to allow the interchangeability of component parts.

The Los Angeles City Fire Department takes an official position in favor of the following changes in future regulations.

RECOMMENDATION:

1. Individual component parts or accessories for respiratory protective systems should undergo individual testing and approval without being a part of a complete system.
2. Standards should be established requiring manufacturers to provide interface components that will accommodate interchangeability between their system and other major respiratory protective systems.



3. Respiratory protective systems should be designed to accommodate both a positive pressure and demand mode as the need arises. Such a dual function would be consistent with emergency situations which can involve a routine structure fire or an emergency involving highly toxic substances such as pesticides, known carcinogens, etc.
4. Respiratory protective devices should be required to accommodate a buddy breathing system standardized to provide for interchangeability.
5. Federal regulations should require the interchangeability of bottles. Included in this regulation should be the requirement for universal fittings and hand-tight connections not requiring the use of special wrenches or tools.
6. Respiratory protective devices should be required to incorporate a low-air warning device that will positively alert the individual wearer.

The current NIOSH/MESA testing and approval criteria has not been appropriate for respiratory protective devices used by firefighters. The Users of respiratory protective devices must be provided with regulations requiring breathing systems that are practical and economical to use.

If I can be of further assistance, please do not hesitate to contact me.

Respectfully,

JOHN C. GERARD  
Chief Engineer and General Manager