

Report on NIOSH Respirator Meeting Morgantown, WV January 9–11, 1991

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The last issue of the Journal announced a NIOSH Respirator Meeting to be held in Morgantown, West Virginia, January 9–11, 1991. It was a pre-rulemaking technical conference to be concerned with the Assessment of Performance Levels for Industrial Respirators. Jeffery S. Birkner, ISRP Vice President, attended the meeting and sent us the following summary:—Ed.

On January 9–11, 1991, NIOSH held a public meeting entitled “**The Assessment of Performance Levels for Industrial Respirators.**” This meeting was a result of comments made to the First Notice of Proposed Rulemaking (NPRM) 42CFR84, which is to replace the existing NIOSH Certification Regulations 30CFR11. In the first NPRM of August 1987, NIOSH proposed that all NIOSH-certified respirators must be tested under workplace conditions or validated simulated workplace conditions, as part of the certification and approval process. Due to comments that no scientifically validated protocols existed for such testing, NIOSH said that they would remove this part of the proposal from the next NPRM to facilitate the acceptance of a new standard for certification with greatly improved and updated laboratory testing. NIOSH proposes that a separate ruling will address workplace or simulated workplace testing at a later date. In order to advance this process NIOSH called this public meeting in an effort to collect information on the subject of workplace testing and simulated workplace testing. Specifically, seven items were posed by NIOSH as concerns and questions on which they wished to obtain information:

1. The feasibility and practicability of developing a detailed protocol for conducting workplace protection factor tests.
2. The available techniques and procedures for measuring assigned protection factors for respirators offering very high levels of protection.
3. The need to standardize nomenclature associated with defining the workplace performance of respiratory protective devices.

4. The procedures and techniques for conducting workplace protection factor studies of gas and vapor respirators.

5. The procedures and techniques for conducting workplace protection factor studies of closed-circuit respirators.

6. The approaches for and benefits and limitations of assigning performance values to individual respirator models.

7. Any additional knowledge, gaps or issues relating to workplace performance testing as a condition of a respirator certification.

NIOSH hired five consultants to listen to all the testimony given at this meeting; each will then give an opinion on the feasibility of workplace or simulated workplace testing based on the testimony provided.

The meeting was well attended, with more than 75 people at the sessions and almost 30 presentations. The speakers represented academia, government, manufacturing, end users, researchers, and consultants. It appeared that the overall opinion was that workplace testing, although in theory one of the best ways to evaluate the efficacy of respiratory protective devices, is scientifically not feasible at this time. No single protocol was presented that could be considered a standard method. It was apparent from the presentations that more research is needed, and that, sometime in the future, the subject should be reevaluated as one aspect of respirator certification. In the meantime, the alternatives offered were simulated workplace testing, more stringent bench

testing, more effective biological monitoring, and more effective evaluation of respiratory protective devices. These alternatives also have their problems, and more research must be conducted on each of these subjects. Regardless, at this time these methods seem to provide a greater potential for controlled evaluation than workplace testing.

All in all, it was very beneficial meeting that will hopefully be only the first step to increased communications between all interested parties. The people at **NIOSH** provided an excellent forum for the exchange of ideas inside and outside the meeting rooms.

