

**Miller, Diane M. (CDC/NIOSH/EID)**

---

**From:** Sell, Robert [Robert.Sell@draeger.com]  
**Sent:** Friday, January 16, 2009 1:20 PM  
**To:** NIOSH Docket Office (CDC)  
**Cc:** Drews, Wolfgang; Rueck, Klaus-Michael; Ammann, Klaus; Bahr, Axel; Hodson, David  
**Subject:** NIOSH Docket 148 - Development Plan for Air-Fed Suit Respirator Performance Requirements  
**Attachments:** Draeger Comments - Air Fed Suit Dev Plan - NIOSH Docket No 148 - Jan 2009.doc

Hello:

Attached please find Draeger Safety's comments on NIOSH Docket 148.

Regards

Bob Sell

Sr. Project Engineer - Protection

Dräger Safety, Inc.  
101 Technology Drive  
Pittsburgh, PA 15275  
Tel: (412) 788-5685  
Fax: (412) 787-2207  
Mobile: (412) 996-9344  
Robert.Sell@Draeger.com  
[www.draeger.com](http://www.draeger.com)

Dräger. Technology for Life®

---  
This communication contains confidential information. If you are not the intended recipient please return this email to the sender and delete it from your records.

Diese Nachricht enthält vertrauliche Informationen. Sollten Sie nicht der beabsichtigte Empfänger dieser E-mail sein, senden Sie bitte diese an den Absender zurück und löschen Sie die E-mail aus Ihrem System.

January 15, 2009

NIOSH Docket Office,  
Robert A. Taft Laboratories, M/S C 34  
4676 Columbia Parkway  
Cincinnati, Ohio 45226

Telephone 513-533-8303, Fax 513/533-8285  
Email: [niocindocket@cdc.gov](mailto:niocindocket@cdc.gov)

Reference: DOCKET NUMBER NIOSH 148  
Development Plan for Air-fed Suit Respirator Standard – December 2,  
2008 NIOSH Public Meeting

Dear Sir / Madam:

Draeger Safety manufactures respirators for various markets and applications therefore we offer the following comments in response to the presentations and request for comments on the Development Plan for Air-fed Suit Respirator Standard which was discussed at the December 2008 Public Meeting hosted by NPPTL.

The following Draeger Safety comments are being submitted for consideration:

### General Comments:

1. Draeger Safety supports the development of a standard to address multiple component personal protection devices which incorporates respirator chemical protection suit technologies. We are always willing to address the needs of the market for new and innovative technologies to protect workers which promote our philosophy of "Technology for Life".
2. The concept of allowing a third party certification agency to handle the suit certification and NPPTL to handle the respiratory protection portion is quite doable. This type of joint certification process went well with the recent NFPA 2007 certification process for Self Contained Breathing Apparatus for the Fire Service which combined NFPA and CBRN certifications and has formed some precedence in how this could be handled for future certifications.
3. There appears to be some disparity between this Development Plan and the proposed ASTM document currently in process in that the ASTM document limits the respiratory protection portion to a Supplied Air Respirator (SAR) or a

Powered Air Purifying Respirator (PAPR) whereas the Development Plan, in addition to the SAR, refers to Air Purifying Respirator (APR). Draeger Safety is wondering if the APR terminology is being used generically to cover only a PAPR or is it the intent to address negative pressure APRs also? It seems that if a positive pressure inflated chemical protection suit (CPS) coupled with a negative pressure APR is used that there may be issues in reliably maintaining the positive pressure within the suit. Draeger suggests that if it is intended to evaluate CPS with a negative pressure APR then this may need to be another category within the Development Plan. We do see a need where CPS needs to be fully evaluated with any respirator that could be used to determine if they components can be used reliably together.

4. NPPTL should develop a new subpart to address the certification of these devices. In addition, there is also a need to separate the subpart into sections which can address the various respirators that could be utilized with the CPS. There could always be a general section which would cover common areas; i.e.: LRPL testing, but specific respirators need to be separated.
5. The items listed in Table 1 all appear to be appropriate for testing and evaluation. Some further items for consideration for those listed are:
  - a) Inward leakage evaluation during various activities
  - b) Air Supply Source – Consider the use of various cylinders, 2216/4500 psi (up to 9 L water capacity) that may be used for the air source and not only an air source provided by air supply hoses from remote point of attachments. These requirements should also consider the pressure regulator used to supply the suit.
  - c) Visors need to be evaluated for impact and penetration resistance. Some of the documents that are referenced were not immediately available for Draeger to review at this time in order to determine if this is addressed.
6. The items listed in Table 2 all appear to be appropriate for testing and evaluation. Some additional items for consideration are:
  - a) Man testing to determine the interface of the subject/respirator/suit combination for selected tasks.
  - b) Self contained escape systems that may be included with the ensemble.
  - c) Communications
  - d) Weight requirement – The current requirement of 35 pounds as identified in 42 CFR, Part 84 may not be appropriate for this application. Some of the suits that are available already weigh 35 pounds.
  - e) Intrinsic Safety – Even though this is not related specifically to respiratory protection the requirements should identify a classification.

Draeger Safety thanks NIOSH for the opportunity to provide comments. Please consider our comments concerning the ongoing development of this standard.

If there should be any questions concerning this matter, please do not hesitate to contact me at 412-788-5685 or via e-mail at [Robert.Sell@Draeger.com](mailto:Robert.Sell@Draeger.com).

Respectfully,

*Robert Sell*

Robert Sell  
Sr. Project Engineer

cc: W. Drews – DST  
A. Bahr – DST  
K. Rueck – DST  
K. Ammann – DST  
D. Hodson – DLtd

