

# National Personal Protection Technology Laboratory

## Air-Fed Ensembles Panel Discussion

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# Docket Information

Stakeholder input can be submitted

By Mail:

**NIOSH Docket Office**

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**Reference: Docket 148A – Air-Fed Ensembles**

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# Panel Discussion - Classifications

- **Classification of NIOSH approved ensembles to indicate intrinsic safety?**
- **What works, is there a common language?**
- **Type I: A design such that the air supply to the suit and the respiratory inlet covering is interdependent**
- **Type II: A design such that air supply to the suit can be disrupted without affecting respiratory protection**

## Panel Discussion - IDLH

- **Feasibility of including escape cylinders, APER?**
- **Development and use of SAR/PAPR combination ensemble?**
- **Test methods to determine the “escape time” potentially offered by an ensemble?**

# Panel Discussion – Use Concerns

- **What classifies an ensemble as disposable or reusable?**
- **What methods are used to ensure proper functioning prior to reuse?**
- **Storage and use temperature concerns?**

# Panel Discussion – Flammability

- **Worker tasks that require the use of an ensemble and flame resistance?**
- **Ignition resistance?**
- **Identifying the test method to measure this property?**
- **Should it be specific to the classification or intended use environment?**

# Panel Discussion – Flammability

- **NFPA 701-1989, Flame Resistant Textiles and Films**
- **EN 1174 1997 Respiratory protective devices for self-rescue. Self-contained open-circuit compressed air breathing apparatus incorporating a hood (compressed air escape apparatus with hood). Requirements, testing, marking**

# Panel Discussion – Visor/Harness

- **Visors evaluated for impact and penetration resistance? For specific users or classification?**
- **External harnesses used with ensembles? How?**

# Panel Discussion – Physical Properties

- **Tensile and burst strength, tear and flex cracking resistance?**
- **Puncture resistance and abrasion resistance (combined with CO<sub>2</sub> dead space test)?**
- **Seam strength, penetration and permeation resistance**
- **Material permeation, liquid penetration, and particle penetration resistance**

# Panel Discussion – Physical Properties

- **Should these properties be classification or use specific?**
- **Data available to indicate the performance level of ensembles currently used?**