

National Personal Protective Technology Laboratory

Air-Fed Ensemble Overview

**Jonathan Szalajda
Policy and Standards Development Branch**

**December 2, 2008
Docket 148**



**Workplace
Safety and Health**



NPPTL *Research to Practice
through Partnerships*

Air-Fed Ensemble Overview

- **Product Performance Evaluation Concept**
- **Issues and Criteria for Air Fed Protective Ensembles – Angie Shepherd**
- **Concept for NIOSH Certification of Air Fed Ensembles – Colleen Miller**
- **Self-Contained Atmospheric Protective Ensemble (SCAPE)
Propellant Handlers Ensemble (PHE) -- Dennis Dudzinski (EG&G)**



Workplace
Safety and Health



NPPTL *Research to Practice
through Partnerships*

Air-Fed Ensemble Product Performance/Evaluation Concept

- Objective is to create criteria to ensure appropriate protection for a configuration where national standards do not currently exist
- NIOSH certification for the respiratory protection criteria will be based on the results of the respirator performance evaluation with and without the ensemble dermal protection performance evaluation
- Initial focus based on stakeholder interest will be air fed ensembles that are comparable to supplied air hoods currently certified under 42 CFR subpart J.
 - NIOSH certification for respiratory performance would be under this subpart
 - Approval for protective characteristics would be based on National consensus standards
- Compliance with the appropriate subparts of 42 CFR Part 84 will be required regardless of the evolution of the ensemble performance criteria



Workplace
Safety and Health



NPPTL

Research to Practice
through Partnerships

Air-Fed Ensemble Product Performance/Evaluation Concept

- Present:
 - Respiratory Protection
 - Compliance with appropriate 42 CFR Part 84 subpart
 - Additional requirements per para. 84.60(b) and para. 84.63(c)
 - Reasonable test standard need to be developed for CO2 buildup in suit
 - Reasonable test standard must be developed for ensemble TIL
 - Dermal Protection
 - ASTM (2009) or other SDO consensus standards
- Future (circa 2012 and beyond):
 - Respiratory Protection
 - Compliance with appropriate updated 42 CFR Part 84 subparts
 - Air Fed Ensemble Module
 - SAR Module
 - PAPR Module
 - SCBA Module(s)
 - Additional requirements per para. 84.60(b) and para. 84.63(c)
 - Dermal Protection
 - ASTM or other SDO consensus standards



Workplace
Safety and Health



NPPTL
Research to Practice
through Partnerships