National Personal Protective Technology Laboratory

Air-Fed Ensemble Overview

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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)

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**

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**