September 17, 2009

Policy and Standards Development Branch

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Air-Fed Ensembles

National Personal Protective Technology Laboratory
Topics

Public Comment Period
Panel Discussion

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Supplied Air Suit Overview
O₂/CO₂ Physiological Response
Concept Overview
Introduction
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.
Performance criteria will be required regardless of the evolution of the ensemble.

Compliance with the appropriate subparts of 42 CFR Part 84 would be based on National Consensus Standards — Approval for protective characteristics would be under this subpart.

NIOSH certification for respiratory performance would be under this subpart.

Currently certified under 42 CFR subpart J, ensembles that are comparable to supplied air hoods ensembles that are comparable to supplied air hoods will be air fed.

Initial focus based on stakeholder interest will be air fed.

Performance/Evaluation Concept

Air-Fed Ensemble Product
Dermal Protection

- ASTM or other SDO consensus standards
  84.60(b) and Para. 84.63(c)

Additional Requirements per Para.

- SCBA Module(s)
- PAPR Module
- SAR Module
- Air Fed Ensemble Module
- Updated 42 CFR Part 84 Subparts Compliance with Appropriate
- Respiratory Protection

Future (circa 2012 and beyond):

Air-Fed Ensemble Product

Performance/Evaluation Concept
Facilitate Preliminary TIL testing and STP development
Facility and equipment updates ongoing to
require enhanced probe methods
Human subject breathing STP development
configuration continue
Modifications to the new CO2 dead space test

Performance/Current STP Development
Air-Feed Ensemble Product