

**NIOSH / NPPTL Respirator Manufacturer's
Meeting**

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**Air-Fed Ensemble
Status**

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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

Air-Fed Ensemble Product Performance/Evaluation Concept

- Initial focus based on stakeholder interest will be air fed ensembles that are comparable to supplied air hoods currently certified under 42 CFR Part 84, 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 needs 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

Air-Fed Ensemble Product Performance/Current STP Development

- **Modifications to the new CO₂ dead space test configuration continue; limited preliminary testing completed**
- **Human subject breathing STP development will require enhanced probe methods; further testing for probe placement and data interpretation is needed**
- **Facility and equipment updates ongoing to facilitate preliminary TIL testing and STP development**

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Questions?