

**Program Concept for Total
Inward Leakage (TIL)
Performance Requirements
and Test Methods**

**Rich Metzler and Les Boord
NIOSH/NPPTL Public Meeting
Key Bridge Marriott, Arlington, VA**

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Program Concept for Total Inward Leakage (TIL) Performance Requirements and Test Methods

- Welcome
- NIOSH introductions
- Meeting protocol
 - Presentations
 - NIOSH presenters
 - Other presenters
 - Questions
 - Microphone
 - Name & organization representing
 - Panel discussion
 - Meeting transcribed and recorded

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Meeting Agenda

- Welcome / opening remarks
- Presentation of the TIL Program
- New respirator fit test panel
- Guest speakers
- NIOSH panel discussion
- Closing remarks

Docket Information

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Program Concept for Total Inward Leakage (TIL) Performance Requirements and Test Methods

TIL Program Goal

The NPPTL Total Inward Leakage (TIL) Program will establish TIL performance requirements and laboratory test capability for testing of personal protective equipment (PPE), including all classes of respirators and protective garments

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NPPTL TIL Program - Multiple Projects

- Initial TIL project – Half-mask respirators
- Other respirator classes will be addressed after the half-mask respirator
- Additional TIL research
 - Test methods and procedures for other PPE (garments)

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Half-mask TIL Program Overview

- **Develop TIL requirement & test protocol**
- **Establish TIL test facility**
- **Conduct benchmark testing**
- **Peer review**
- **Public meetings**

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Technical Aspects of Half-mask Project

- Performance requirement based on state of the art technology
 - Respirator performance
 - Test equipment capability
- Anthropometrically correct test panel concept
- OSHA exercises used for testing
- Manufacturer user instructions

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Peer Review

- Programmatic and scientific reviews
- Program concept reviewers
 - Manufacturing
 - Government
 - Academia
 - Labor
 - Subject matter expert
- Potential scientific reviewers
 - Scientific experts (to be determined)

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Public Meetings

- **Two meetings planned for half-mask TIL project**
- **Second meeting Spring 2005**

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Summary

- TIL Program goal:
Establish PPE performance requirement and test capability for PPE
- Half-mask respirator first TIL project
- Other respirators classes after half-mask project
- Research for other PPE (garments) in-process

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**Rich Metzler
Director, NPPTL**

Total Inward Leakage Program (TIL)

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Why TIL:

- Increase the likelihood of having individuals pass an initial fit test
- Standardized evaluation of respirator system performance
- Universally improve fit characteristics of NIOSH certified respirators

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What TIL is:

- **TIL is a respirator performance requirement that will utilize testing to establish the performance capability of respirators**
- **TIL for respirators will be based on state of the art respirator performance**
- **TIL will use best available test technology for establishing performance capability of respirators**

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What TIL is not :

- **TIL \neq APF**
- **TIL does not eliminate the need for individual worker fit testing to assure proper fitting respirators**

Quality Partnerships Enhance Worker Safety & Health

Thank you