

Long-Term Field Evaluation

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LTFE Topics

- Background
 - NPPTL Technology Evaluation Branch
 - Regulatory Authority
 - SCSR Deployment in Mines
- Long Term Field Evaluation (LTFE)
 - LTFE History
 - Proposed LTFE Program
 - Critical Parameters

Regulatory Authority

- Title 42, Code of Federal Regulations, Part 84 (42CFR84)
- NIOSH in conjunction with MSHA §84.3(2)(b)
 - Approved respirators for use in mines
 - Both entry and escape
- Tests and demonstrations of these approved respirators §84.65(e)

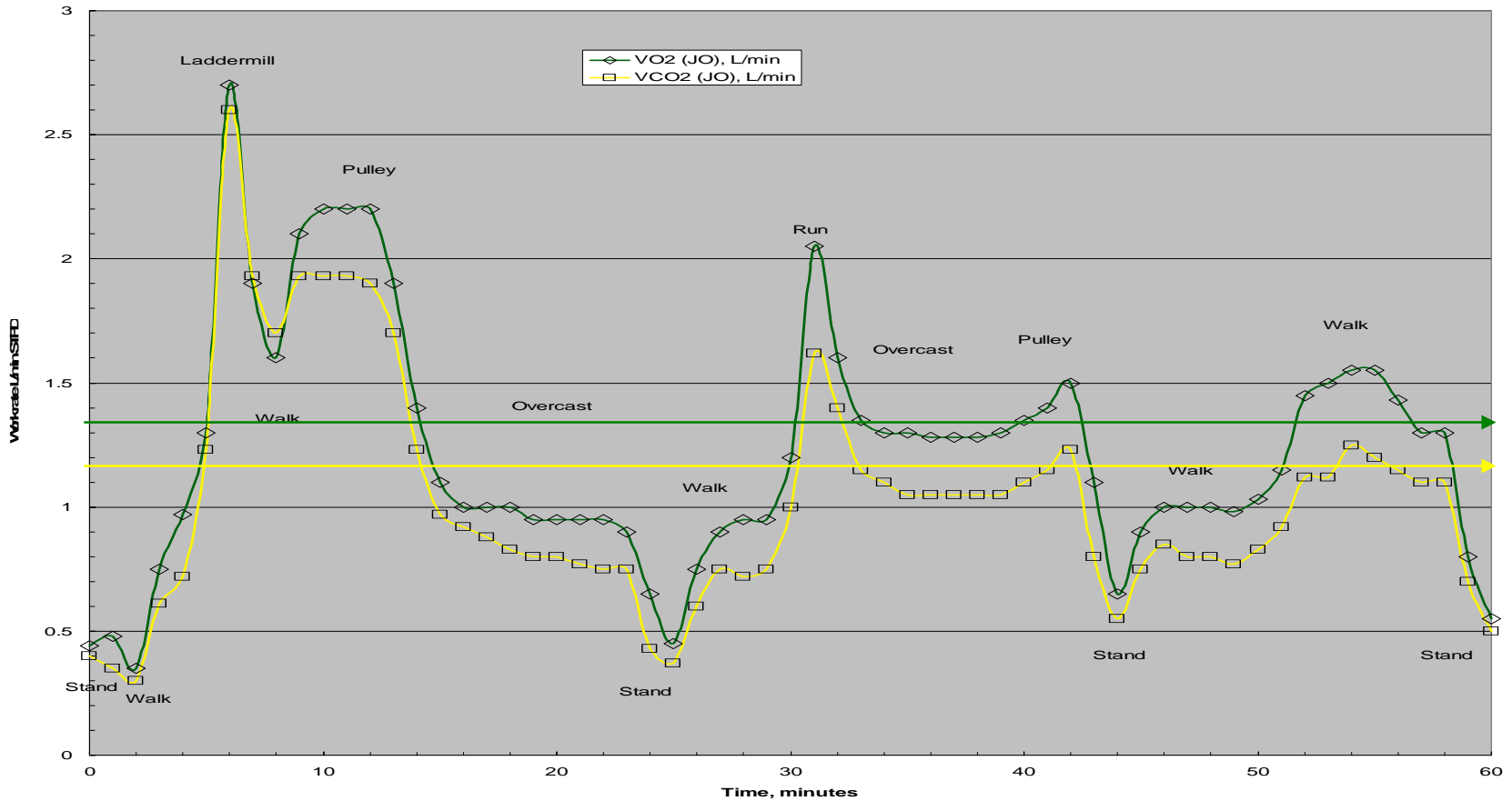
NIOSH Certification Testing

Man Test #4

- Test which assigns rated duration.



Man Test #4 Metabolic Load



MSHA/NIOSH Approved SCSRs



SCSR History

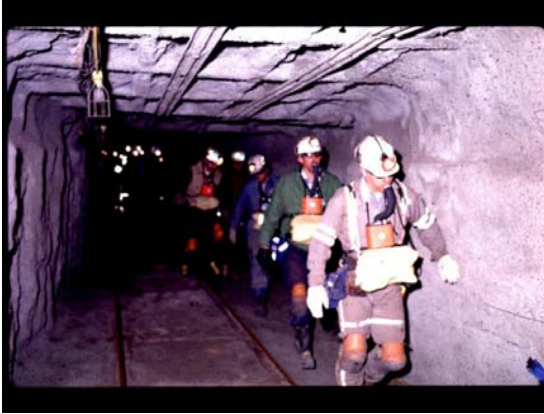
- Pre-1981 miners rely on FSRs
- 1981 1st generation SCSRs
 - Joint MSHA/NIOSH approval under 30 CFR 11
 - MSHA (30 CFR 75.1714)
- 1983 LTFE begins
- 1989 2nd generation SCSRs
 - Smaller, lighter weight
- 2001 NPPTL Established
 - LTFE expands
 - 200 SCSRs/year
- 2006 MSHA Emergency Mine Evacuation Standard – Final Rule



Long-Term Field Evaluation (LTFE)



Current Long-term Field Evaluation



Objective: Self-contained self-rescuers (SCSR) used for escape to a point of safety from a mine fire or explosion should provide dependable respiratory protection

Project Scope

- Mine-deployed units are collected for inspection and performance evaluation to assess their reliability through their projected service life
- 200 SCSRs per year are audited to ensure proper functioning in the event of an emergency

Applicable Standards

- 42 CFR Part 84
- 30 CFR Part 75.1714

Key Partners

MSHA
ISEA
UMWA
NMA
BCOA
USWA

Stakeholders

- ISEA and manufacturers
- Respirator users

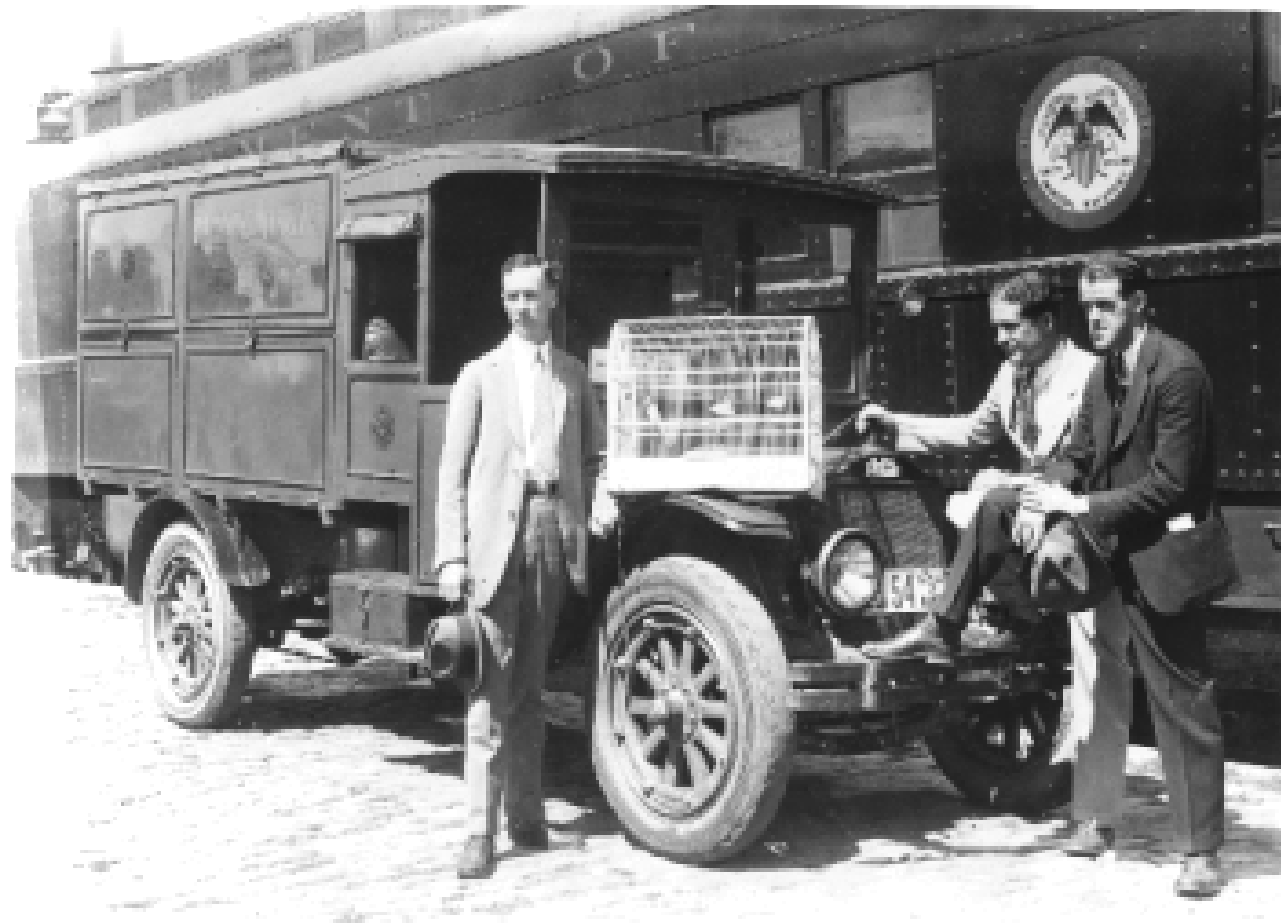
Milestones

200 SCSRs per year are audited to ensure proper functioning in the event of an emergency

Outputs

- SCSR failures will be prevented as a result of the discovery of design flaws or susceptibility to environmental damage
- Audit of certified performance of NIOSH-approved respirators
- Published report of operational readiness of aging units

We Have Been at this for a While



First Generation SCSRs



Deployed SCSRs (Phases 1

- 5)

