

# **Current Department of Defense Status and Plans for an Occupational Exposure Limit for Trichloroethylene**

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**PERSONNEL AND READINESS**



## Goal

Develop an occupational exposure limit (OEL) for protecting DoD personnel from health effects from workplace inhalation of trichloroethylene (TCE)

- Occupational Safety and Health Act of 1970, SEC. 5.(a) Duties:  
“Each employer -- shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees;”
- 29 CFR 1960.16 Compliance with OSHA Standards:  
“... an agency may ... prescribe and enforce more stringent permissible exposure levels or threshold limit values ...”



## Background

- EPA established criteria for vapor intrusion from cleanup sites into occupied spaces
  - EPA measured TCE in three DoD workplaces exceeding EPA cleanup criteria
- DoD Commanders requested industrial hygiene advice
  - airborne levels were below OSHA permissible exposure limits
- Commanders and personnel uncertain regarding risk and actions
  - EPA and OSHA exposure limits differ by orders of magnitude
- Military Departments requested a DoD occupational exposure limit for TCE to apply to vapor intrusion



## Revisiting the Goal

- Goal: Develop an occupational exposure limit for protecting DoD personnel from health effects from workplace inhalation of TCE
- Objective: Develop a health risk-based TCE OEL to manage employee health risk for all exposure scenarios
  - 'occupational' - employee use of TCE in work tasks [OSH Act Sec 5. 'employment']
  - 'environmental' - passive from vapor intrusion [OSH Act Sec 5. 'place of employment']
- Next Objectives:
  - Determine feasibility to measure and control to the health risk-based OEL
  - Present for leadership risk decision



## Status in the OEL Development Process

- Validate health risk
- Develop draft OEL based on health risk
  - Tri-Service Toxicology Consortium, Occupational Medicine WG, Industrial Hygiene WG
- Independent scientific review of OEL development approach and results (Committee on Toxicology)
  - Review with external stakeholders (EPA, OSHA, NIOSH)
- Assess technical feasibility, mission impact of adopting OEL
- Develop draft DoD OEL policy to balance health, feasibility, mission risk
- DoD makes a risk decision

You



# Questions?