

NIOSH Review of Hanford Tank Farm Worker Safety and Health Programs

January 26, 2017

Department of Health and Human Services
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health



Agenda

- Actions Taken
- Findings
- Recommendations
- Discussion

NIOSH Activities

WRPS and DOE technical staff

- Review, discuss, and observe sampling and analytical capabilities, rationale for selection of Chemicals of Potential Concern (COPC), and odor/symptom response protocol

On-site occupational health physicians and staff

- Review procedures for management of workers who experience illness associated with tank farm vapors, how work-relatedness is determined, and utilization of worker medical data for surveillance

Vapor Management Expert Panel, Chemical Vapor Solution Team, and New Technology subcommittee

- Discuss current activities, progress, and plans for addressing worker chemical exposure concerns

NIOSH Activities

Confidential interviews with 88 workers, IH staff, and management

Interviews with DOE and WRPS OSH management, union safety representatives, and IH technicians

Tour of tank farms and associated work areas

Tour of IH and respirator laboratory in WRPS Building 2704

Findings

DOE and WRPS have made significant investments

- Monitoring technology
- Hiring of IH staff and technicians
- Forming technical worker-management groups
- Establishing programs and procedures to address OSH issues associated with the tank farms

Procedures and protocols for responding to health and odor events appear technically appropriate

Findings, cont.

DOE and WRPS efforts are primarily focused on determining if exposures are occurring

Per DOE, thousands of air samples have been and continue to be collected and no overexposures have been identified

There appears to be less emphasis on controls until/unless a health hazard can be confirmed via exposure monitoring

Findings, cont.

Odors and worker symptoms associated with working at the tank farms continue to be experienced

Determination of work-relatedness and the perceived unfairness of the workers compensation system has been a long-standing and contentious issue

Findings, cont.

There are complex and persistent issues of suspicion, distrust, skepticism, and apprehension between employees, union leadership, and DOE and contractor staff and management regarding exposure to tank farm vapors

These issues are a core obstacle to resolving tank farm worker health and safety issues

Overarching Recommendation: Shift Emphasis to Control

Even in the absence of a documented hazard, implementation of engineering controls is a prudent precautionary approach

Use of respiratory protection for routine work should be an interim control only and not a permanent solution

Overarching Recommendation: Shift Emphasis to Control

Additional controls to consider

- Minimize the need for and number of workers who must enter the tank farms
- Relocate ancillary personnel away from the vicinity/perimeter of the tank farms

Establish, as much as possible, an evidence-based rationale for the tank farm perimeter

Overarching Recommendation: Improve Labor-Management Interaction

Efforts to improve communication, transparency, and inclusion in safety and health decisions should include:

- DOE/contractor management and union/worker interaction
- Contractors/workers/IH staff and technicians at the work site's supervisory and middle-management levels

DOE and WRPS leadership should acknowledge health concerns as legitimate and have direct interaction with workers on these issues

Implement previous risk communication recommendations from TVAT report and consultants

Overarching Recommendation: Address Workers' Medical Questions

Consult with professional occupational epidemiologists

- Review medical data that are available for the Tank Farm Hazardous Waste Workers
- Provide expert advice on data analysis and interpretation
- Provide all workers with more thorough explanation of the policies regarding return to work

Overarching Recommendation: Address Workers' Medical Questions

Coordinate with the L&I Workers' Compensation (WC) ombudsman to organize worker meetings to discuss WC Program questions and issues

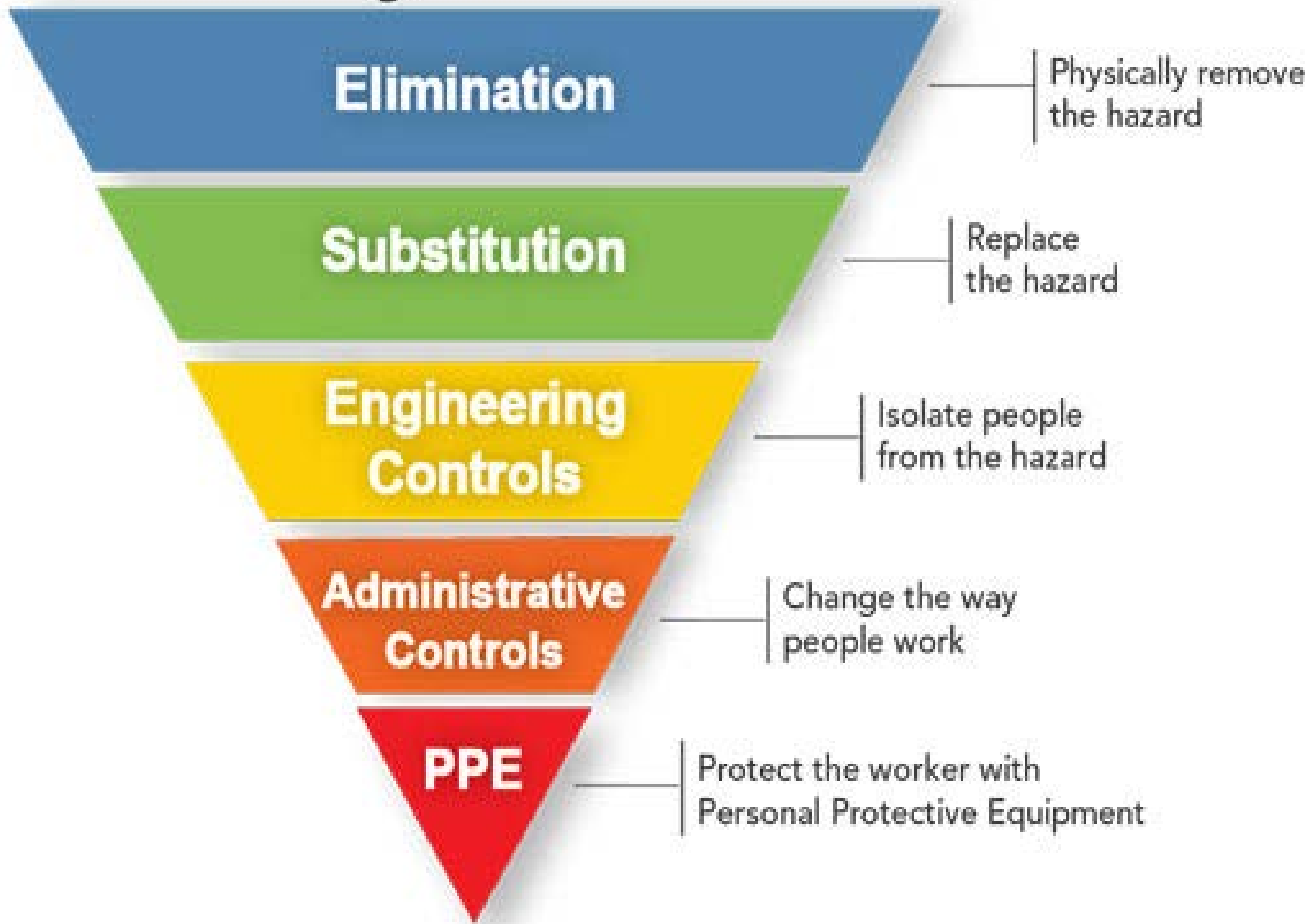
Provide workers (former and current) information about participating in the DOE Former Worker Medical Screening Program

Discussion



Hierarchy of Controls

Most effective



Least effective