



U.S. DEPARTMENT OF ENERGY

Presentation to

2014 Waste Management Symposium

**Session 35 – International Panel on
Safety Culture in Waste Management and D&D**

Julie A. Goeckner

Sr. Advisor on Nuclear Safety Culture
Office of Safety, Security, and Quality Programs
Office of Environmental Management



EM *Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure

www.em.doe.gov

Presentation Agenda

- Evolution of the Department of Energy
- What is safety culture?
 - DOE safety culture definition
- What has DOE done with safety culture?
 - How DOE has incorporated safety culture practices/principles
 - Ongoing activities
- How is DOE measuring safety culture?



Department of Energy

➤ Evolution of the Department of Energy

- Manhattan Project - August 1941
- Atomic Energy Act of 1946
- Atomic Energy Act of 1954
- Energy Reorganization Act of 1974
- DOE established - October 1, 1977



- DOE Mission: To ensure America's security and prosperity by addressing its energy, environmental and nuclear challenges through transformative science and technology solutions.
- DOE is responsible for the nation's nuclear weapons program, nuclear reactor production for the U.S. Navy, energy conservation, energy-related research, radioactive waste disposal, and domestic energy production.
- DOE is an owner and an operator (+/- 10,000 Federal employees & +/-100,000 contractor and laboratory employees)
- DOE is OSHA self-regulated



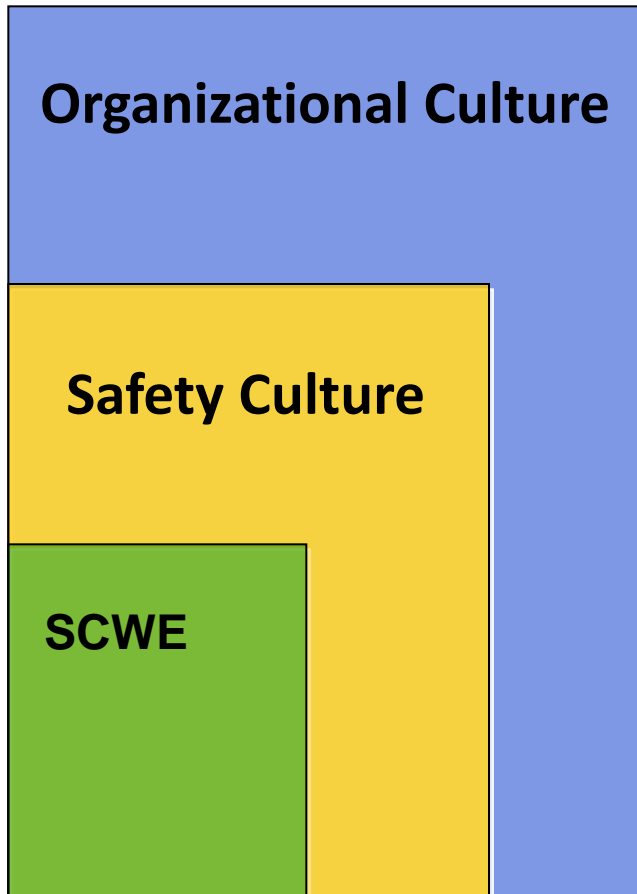
EM *Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure

www.em.doe.gov

Safety Culture – What Is It?

DOE Definitions – Elements of Culture



Organizational Culture

- A set of commonly shared beliefs, expectations, and values that influence and guide the thinking and behavior of organization members, and are reflected in how work is carried out.

Safety Culture

- An organization's values and behaviors modeled by its leaders and internalized by its members, which serve to make safe performance of work the overriding priority to protect the workers, the public, and the environment.

Safety Conscious Work Environment

- A work environment in which employees feel free to raise safety concerns to management (or a regulator) without fear of retaliation.



Safety Culture – What Has DOE Done?

- Incorporated safety culture and SCWE principles/practices into DOE's existing Integrated Safety Management System
 - DOE P 450.4A – Integrated Management System (ISM) Policy
 - DOE G 450.4-1C – ISM Guide
 - Attachment 3, ISM Overview
 - Attachment 10, Safety Focus Areas and Associated Attributes
 - Three Focus Areas
 - Leadership
 - Employee Engagement
 - Organizational Learning
 - Describes what a positive safety culture looks like and feels like
 - DOE's comparable document to INPO Traits for Nuclear Safety Culture

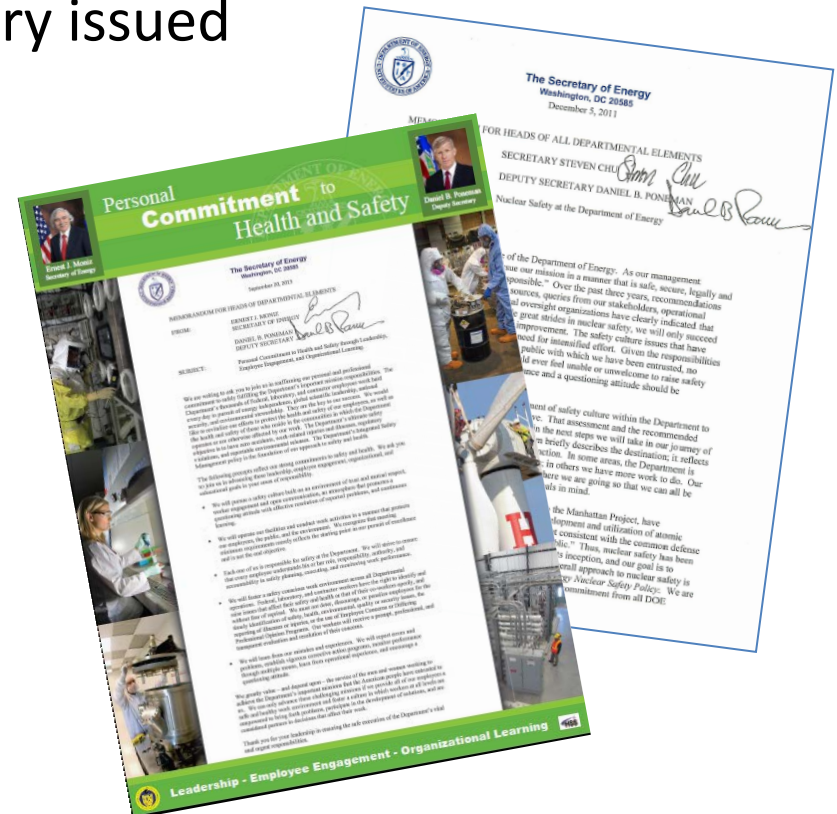


Safety Culture – What Has DOE Done?

- DOE developed a comprehensive implementation plan
- Issues raised at Waste Treatment and Immobilization Plant (WTP) in 2010 resulted in actions to strengthen the safety culture.
- DOE Secretary and Deputy Secretary issued expectations.

“We will pursue a safety culture built on an environment of trust and mutual respect, worker engagement and open communication, an atmosphere that promotes a questioning attitude with effective resolution of problems, and continuous learning.”

*Ernest J. Moniz, Secretary
Daniel B. Poneman, Deputy Secretary*



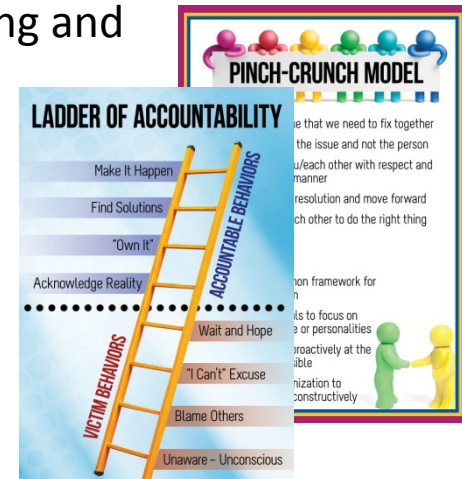
EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.em.doe.gov

Safety Culture – What Has DOE Done?

- DOE's comprehensive implementation plan (cont.)
 - Developed an action/improvement plan to address issues specific Office of River Protection (ORP) and WTP.
 - Developed an strong oversight plan for ORP and WTP.
 - DOE's Office of Health Safety and Security conducted:
 - An assessment at WTP to evaluate the status in establishing a SCWE
 - Independent assessments/reviews of selected major DOE projects
 - Developed and presented an 8 hour training course for DOE and DOE contractor senior leaders on safety culture and SCWE; conducted 76 sessions to date and trained +/-1,800 senior leaders, which provided:
 - A clear understanding of senior leaders role in establishing and maintaining a positive safety culture / SCWE
 - Consistent understanding of safety culture and SCWE practices/principles
 - Practical tools/resources to assist leaders in fostering a work environment of trust, a questioning attitude and a receptiveness to raising issues



Safety Culture – What Has DOE Done?

- DOE's comprehensive implementation plan (cont.)
 - Developed guidance for conduct of self-assessments.
 - Conducted 36 self-assessments across the DOE complex
 - Office of Environmental Management
 - Office of Science
 - National Nuclear Security Administration



- Currently developing a consolidated report using analysis of Independent Assessments and SCWE Self-Assessment for trends – strengths and opportunities for improvement
- Development of departmental actions for ongoing safety culture management with the DOE complex



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.em.doe.gov

Safety Culture – How is DOE Measuring It?

- Independent safety culture assessments and SCWE self-assessments provide baseline to measure progress of this journey
- Town hall meetings
- Validation and effectiveness reviews
- Benchmarking with other Federal agencies and organizations regarding safety culture efforts
- Considering revisions to contractual language to place appropriate emphasis on safety culture [balanced priorities -- completing the mission/conducting work safely]

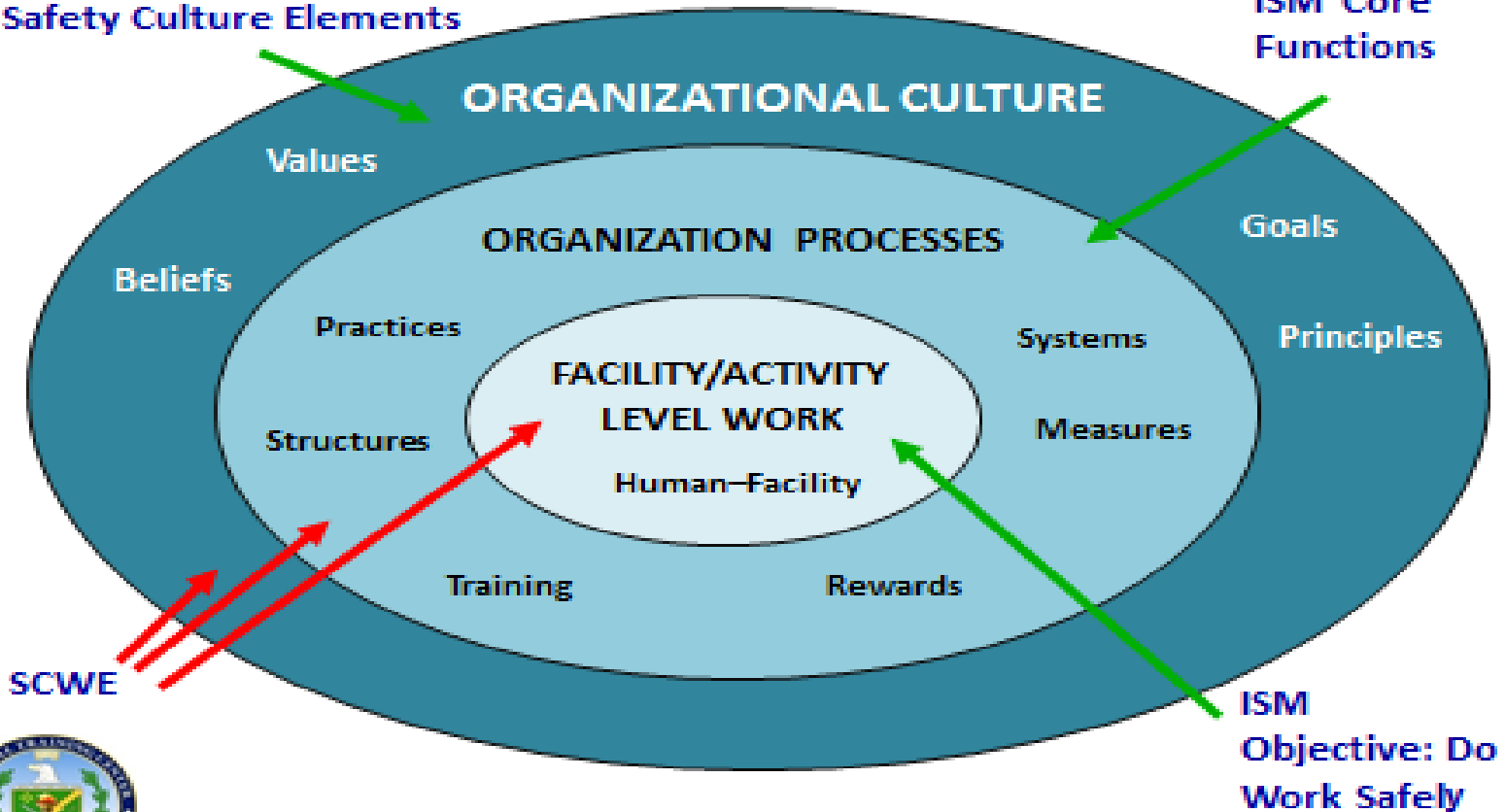


Safety Culture – What Has DOE Done?

ISM Overview

ISM Guiding Principles
and Safety Culture Elements

ISM Core
Functions



U.S. Department of Energy - National Training Center



EM Environmental Management

safety ♦ performance ♦ cleanup ♦ closure

www.em.doe.gov