

# **Working Construction on DOE Sites: Rights & Responsibilities**

**3-hour Worker course in  
accordance with 10 CFR 851  
4-hours for Business Agents  
and Stewards**

# **Sections to this 3-hour course**

- 1. Introduction**
- 2. Access to Information**
- 3. Reporting Events and Hazards**
- 4. Risk Identification and Assessment**
- 5. Worker Exposure Assessment**
- 6. Communications**
- 7. Extra hour for Business Agents and Stewards**

# Section 1

# Introduction



**At the end of this first section,  
you will be able to:**

- 1. Describe the 851 requirements for employers on DOE sites**
- 2. Describe the 851 requirements for employees involvement on DOE sites**

# DOE has developed and enforces its own health and safety programs, with OSHA's support



Oak Ridge's mile-long K-25 Plant

# The 851 Rule applies to contractors. How are they defined?

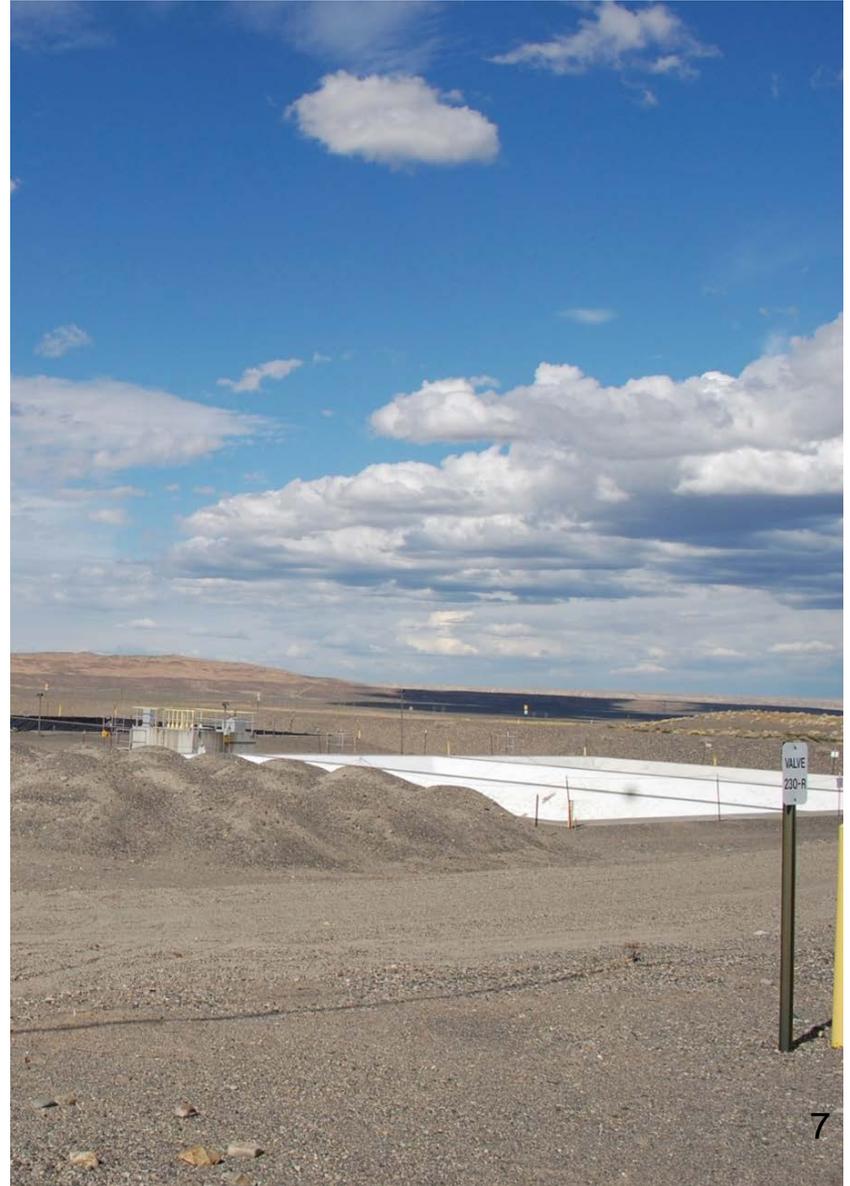
Anyone under contract with DOE,  
including subcontractors at *any* tier

Preventing erosion

Photo courtesy DOE and Wikimedia

# What contractor activities are covered?

- design
- construction
- operation
- maintenance
- decontamination/  
decommissioning
- environmental  
restoration



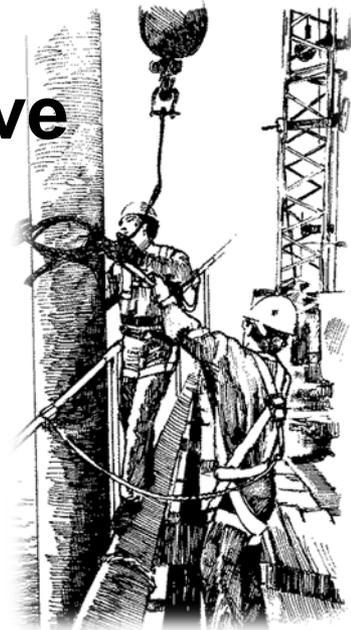
# What is not covered?

1. Sites regulated by OSHA or sites operated by Naval Nuclear Propulsions
2. Radiological hazards or nuclear explosives under Parts 20, 820, 830 or 835
3. Activities performed away from a DOE site
4. Transportation activities to and from a DOE site



# What responsibilities do contractors have under 851?

1. Provide a place of employment that is free from recognized hazards
  - What does this mean?
  - Is it even possible?
2. Prepare a written worker safety and health program that includes policies, goals and objectives
  - How many have seen a written program?



# **Contractor responsibilities under 851 (cont) :**

- 3. Involve workers in the identification and control of hazards in the workplace**
  - Have you ever been involved in identifying or controlling hazards? Examples?**
  
- 4. Establish procedures for workers to report without reprisal job-related incidents and hazards and recommend controls**
  - Will workers be considered troublemakers if they report incidents or hazards or recommend controls?**

**All contractors and subcontractors  
at any level must be included in  
an approved written WSHP  
851 Implementation Guide 2011**



Photo courtesy Neil Lippy

# Enforcement can occur when responsibilities are not met

- **September 13, 2007**
- **Multiple violations of 851 from a polyvinyl chloride (PVC) pipe explosion**
- **Owner, General & Sub-Contractor were all cited**



# What is required of you?

- **Comply with the 851 rule**
- **Comply with the contractor's safety and health program**
- **PARTICIPATE! Partner with the contractors to protect yourself and everyone else on the job**



# Section 2

# Access to Information



# **At the end of this section you will be able to:**

- 1. Define what information workers have a right to see under 10 CFR 851**
- 2. Describe training requirements under 851**
- 3. Using a case study and informational tools, describe the health and safety hazards posed by an operation**

# What training requirements fall on the contractors and subs?

- **Develop and implement a S&H training and information program for all workers potentially exposed to hazards**
- **Provide training to new employees before or at the initial assignment to a job involving exposure to a hazard**
- **Provide periodic training as often as needed**



# **“Qualified employees make excellent instructors for new employees.”**

**DOE 851 Implementation Guide, 2011**



# Stanford Linear Accelerator (SLAC) Case Study

Hot tap



Exploded PVC pipe



# Section 3

# Reporting Events and Hazards



**At the end of this section,  
you will be able to:**

- 1. State the 851 reporting requirements for events and hazards**
- 2. State what near-misses are and why they are important to track**

# What are the goals of reporting incidents and hazards?

- Prevent recurring incidents
- Prevent similar incidents from causing injury or fatality
- Identify hazards and implement controls

Workers weld shut the last opening to the P Reactor 105-P building at Savannah River site, courtesy DOE



# Workers are encouraged to report hazardous conditions and are protected from reprisal



# 851.20(a)(7) requires prompt employer response to reports



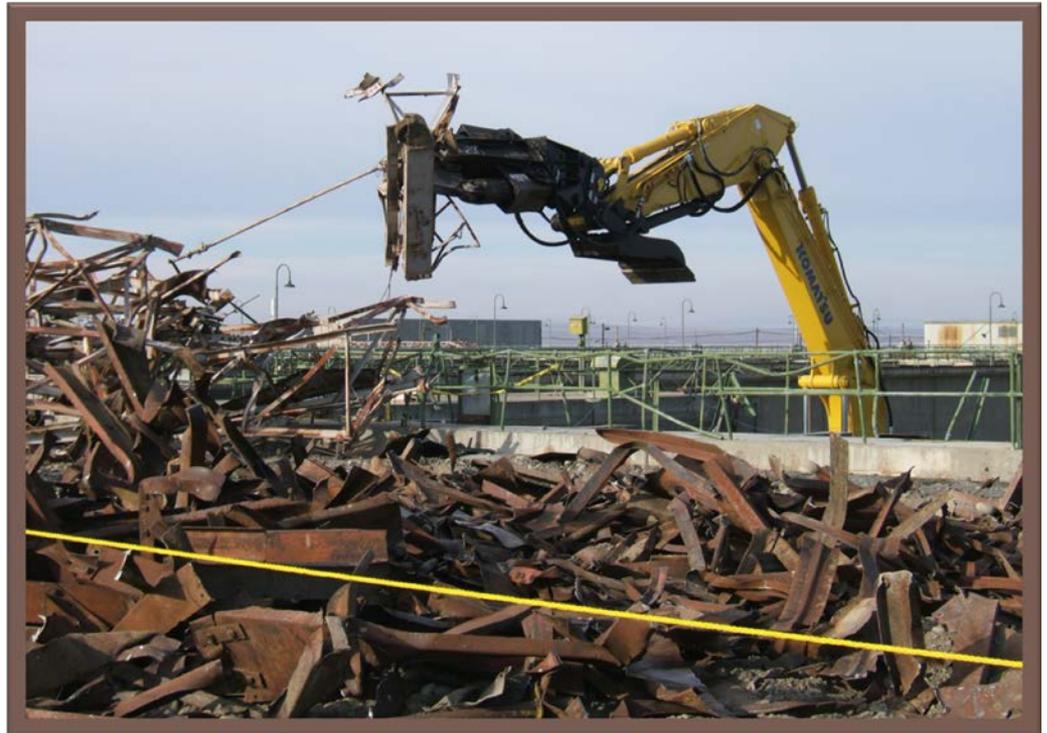
**Workers assess the situation before continuing construction on a DOE project**

# Contractors must report closure facility hazards and controls to DOE within 90 days after hazards are identified 851.21(b)

**Closure facilities are buildings being demolished or deconstructed**

**Why the concern?**

An excavator removes debris from a sedimentation basin, 100K Area, Hanford, WA



# 851.20(a)(6) sets forth employer reporting responsibilities

**“...establish procedures for workers to report without reprisal job-related fatalities, injuries, illnesses, incidents, and hazards and make recommendations about appropriate ways to control those hazards.”**



Have you seen  
this poster on  
your worksite?

Have you  
read it?

Is this the  
latest version?

M15

## You Have a Right to a Safe and Healthful Workplace

# ***IT'S THE LAW!***

- ✓ You have the right to notify your employer or the local Department of Energy (DOE) office about workplace hazards, without reprisal. You may ask that your name not be used.
- ✓ You have the right to participate in the activities referenced in 10 CFR 851 "Worker Safety and Health Program," on official time.
- ✓ You have the right to access copies of DOE worker protection publications; the worker safety and health program for your workplace; and the standards, controls, and procedures that apply to your workplace.
- ✓ You have the right to have access to some accident and illness recordkeeping logs and the information in records of any workplace illness or injury that you experienced.
- ✓ You have the right to observe monitoring or measuring of hazardous agents, to receive the results of your own monitoring, and be notified when monitoring results indicate an overexposure.
- ✓ You have the right to have a representative accompany the DOE's Director for Enforcement or the Director's authorized personnel during the inspection of your workplace.
- ✓ You have the right to request and receive results of inspections and accident investigations.
- ✓ You have the right to decline to perform an assigned task because of your reasonable belief that, under the circumstances, the task poses an imminent risk of death or serious physical harm to you, coupled with your reasonable belief that there is insufficient time to seek effective redress through the normal hazard reporting and abatement procedures.
- ✓ Your employer must post this notice in your workplace.



Title 10 CFR 851 requires DOE contractors to provide their workers with a safe and healthful workplace. To obtain more information about those requirements and your rights; seek advice or assistance; or to report a safety concern, contact your supervisor, the LBNL EH&S Division Office at ext. 5514, the DOE Berkeley Site Office at ext. 4373, or the DOE Office of Health, Safety and Security (<http://www.hss.energy.gov>). Additional inquiries or concerns may be addressed to the Employee Concerns Manager at the DOE Berkeley Site Office, Berkeley, CA 94720.



# This is the latest poster.

# It includes a link to request a DOE investigation.

M15



### It's the law!

#### EMPLOYEES:

##### Must have access to:

- DOE safety and health publications;
- The worker safety and health program for their location;
- This safety and health poster;
- Copies of their medical records and records of their exposures to toxic and harmful substances or conditions; and
- Results of inspections and accident investigations.

##### Must be able to:

- Express concerns related to worker safety and health;
- Decline to perform an assigned task because of a belief that the task poses an imminent risk of death or serious physical harm;
- Stop work in imminently dangerous conditions; and
- Anonymously request an investigation.

#### EMPLOYERS must:

- Establish a written Worker Safety and Health Program;
- Use qualified worker safety and health staff;
- Provide mechanisms to involve workers and their elected representatives in developing the safety and health program;
- Establish procedures for workers to report without reprisal job-related hazards and for prompt response to such reports;
- Provide for regular communication with workers about workplace safety and health matters; and
- Display this poster in the workplace where it is accessible to all workers.

#### This poster is available at:

[http://www.hss.doe.gov/healthsafety/wshp/rule851/2012\\_Safety\\_Health\\_Job\\_poster.pdf](http://www.hss.doe.gov/healthsafety/wshp/rule851/2012_Safety_Health_Job_poster.pdf)

#### 10 CFR 851, Worker Safety and Health Program is available at:

[www.hss.doe.gov/healthsafety/wshp/rule851/851final.html](http://www.hss.doe.gov/healthsafety/wshp/rule851/851final.html)

#### How to Request an Investigation:

Employees have the right to request, anonymously if desired, that the Director of DOE's Office of Enforcement and Oversight conduct an investigation of potential regulatory violations.

Employees can make the request at:

<http://www.hss.doe.gov/enforce/ir/forms/options.asp>.

DOE encourages employees to use local employee concerns processes before requesting an enforcement investigation.

#### Local employee concerns processes:



Employee Voice Ethics Hotline: 1-877-631-0018

Employee Voice Ethics On-line - <https://lnl.alertline.com/gcs/welcome>

Ethics Office: 1-925-424-4002 or <https://ethics.llnl.gov/>

# Multi-contractor sites require coordination, clear roles, responsibilities and procedures 851.11(2)(ii)

**Why is this so important?**



# Section 4

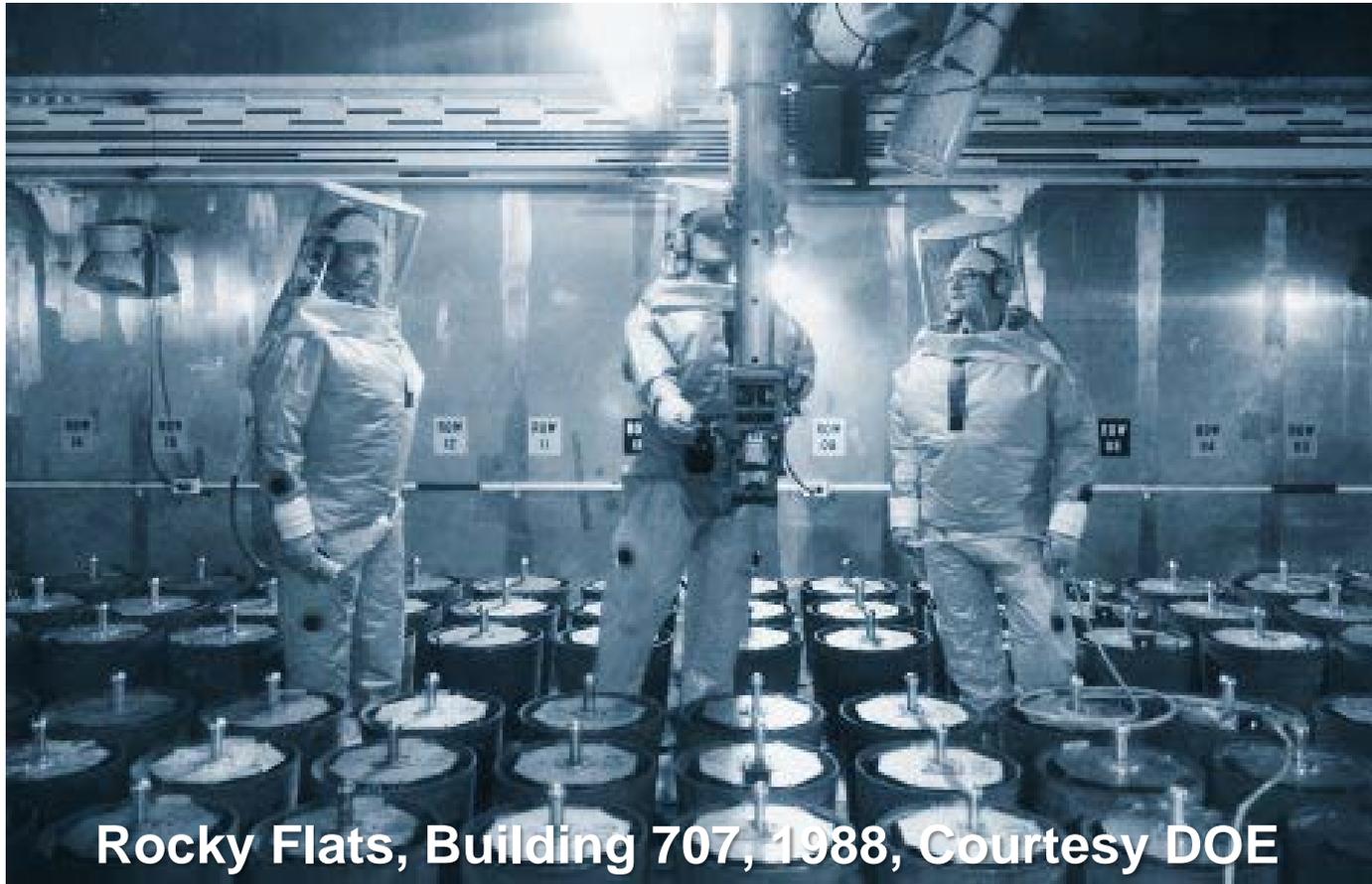
# Risk Identification and Assessment



**At the end of this session,  
you will be able to:**

- 1. Perform a hazard analysis**
- 2. Determine appropriate controls for case studies using the hierarchy of controls**

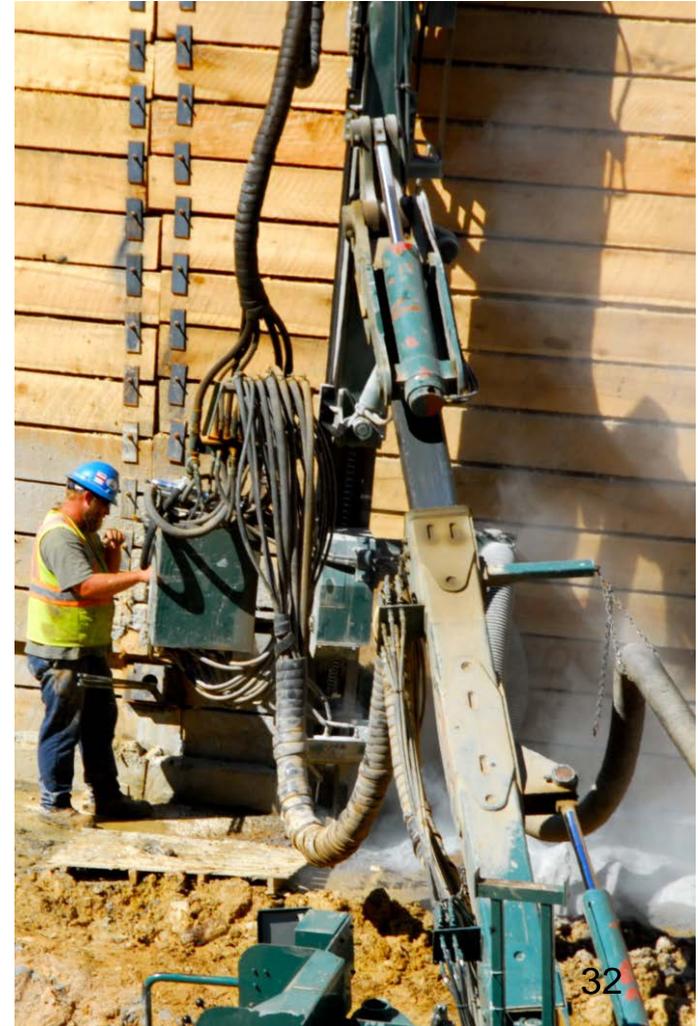
**Contractors must establish procedures to identify hazards, assess the associated risks and then prevent or abate the hazards**



# Workers at a covered workplace have the right, without reprisal, to:

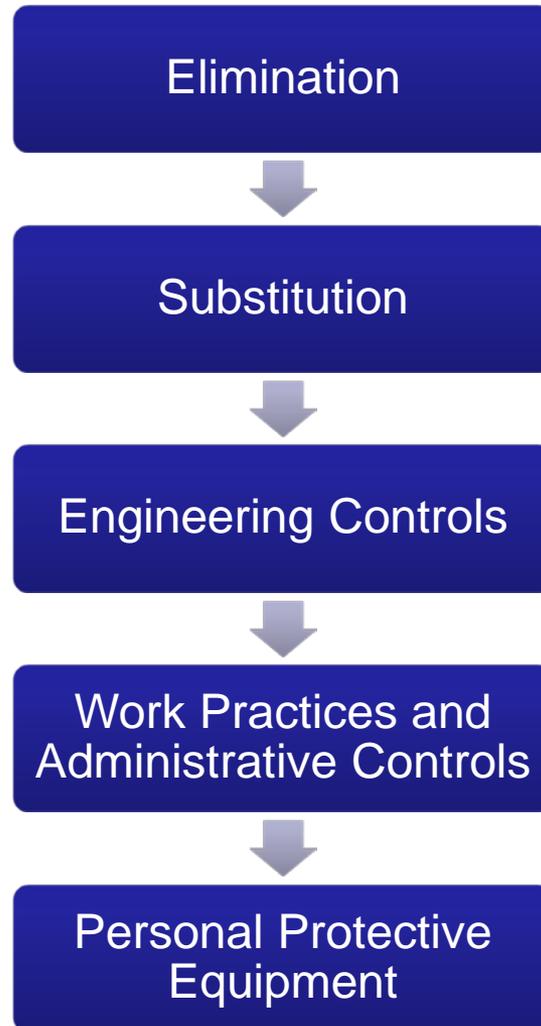
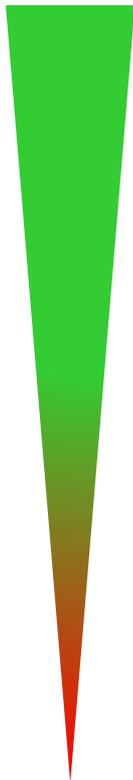
- Have a representative authorized by employees accompany inspections of the workplace
- Request and receive results of inspections and accident investigations
- Be notified of results from overexposures

Photo courtesy Whiting  
Turner Construction Co.



# 851 requires contractors to use this hierarchy to control hazards

Most Effective



M17

Least Effective

**Why should workers be involved in control decisions?**

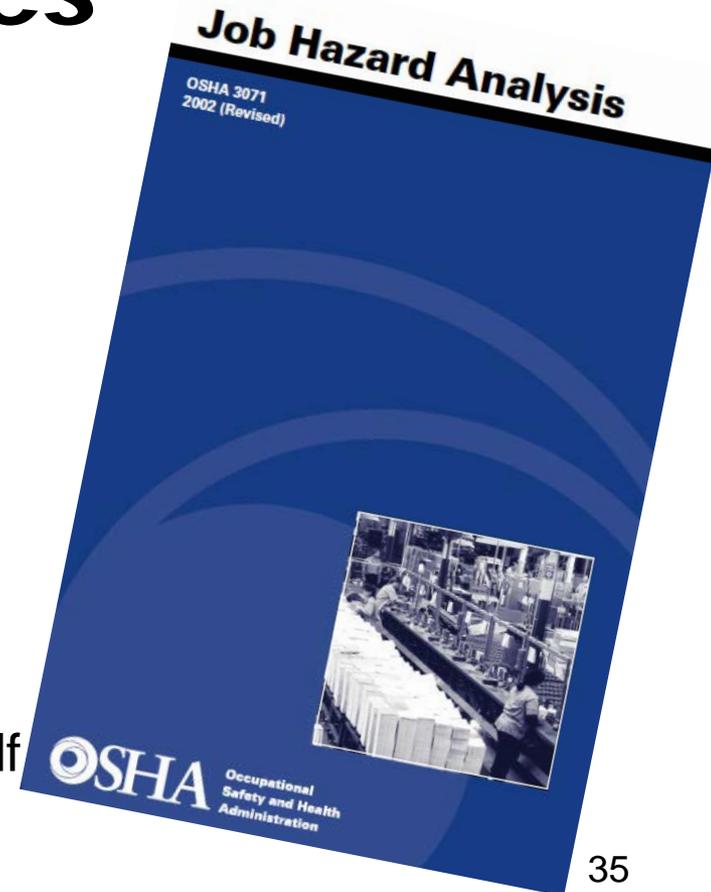
# Integrated Safety Management (ISM) has been DOE's main model for identifying and controlling hazards



# OSHA recommends involving employees in Job Hazard Analyses

DOE 851 Implementation Guide references this OSHA document

<http://www.osha.gov/Publications/osha3071.pdf>



# The Task Safety Awareness (TSA) Card is a checklist used at Hanford

It follows the 5 core functions of Integrated Safety Management

Task Safety Awareness Card 

**1. Define the Work Scope**

Date: \_\_\_\_\_

Supervisor: \_\_\_\_\_

Location: \_\_\_\_\_

Job Description: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**2. Identify the Hazards 3. Specify the Controls**

<b>Chemical</b>	<input type="checkbox"/> Y	<input type="checkbox"/> N
Corrosive, Poison/Toxic, Carcinogen, Flammable, Oxidizer, Incompatible, etc.		
Control: _____		
<b>Biological</b>	<input type="checkbox"/> Y	<input type="checkbox"/> N
Animal/Insect, Sewage/Septic, Pathogens, etc.		
Control: _____		
<b>Inhalation Hazards</b>	<input type="checkbox"/> Y	<input type="checkbox"/> N
Asbestos, Beryllium, Silica, Irritants, etc.		
Control: _____		
<b>Electrical</b>	<input type="checkbox"/> Y	<input type="checkbox"/> N
Shock, Flash, Overhead Power Lines, etc.		
Control: _____		
<b>Motion</b>	<input type="checkbox"/> Y	<input type="checkbox"/> N
Caught Between, Pinch Points, Moving Equipment, etc.		
Control: _____		
<b>Gravity</b>	<input type="checkbox"/> Y	<input type="checkbox"/> N
Elevated Work, Slips / Trips, Fall from Height, Falling Objects, Floor Overload, etc.		
Control: _____		
<b>Confined Space / Engulfment</b>	<input type="checkbox"/> Y	<input type="checkbox"/> N
Tank / Void, Excavation, etc.		
Control: _____		
<b>Flying Objects / Debris</b>	<input type="checkbox"/> Y	<input type="checkbox"/> N
Demolition Debris, Dust/Dirt, etc.		
Control: _____		
<b>Weather</b>	<input type="checkbox"/> Y	<input type="checkbox"/> N
Extreme Heat / Cold, High Wind, Lightning, etc.		
Control: _____		
<b>Ergonomics</b>	<input type="checkbox"/> Y	<input type="checkbox"/> N
Repetitious Motion, Pulling/Pushing, Heavy Loads, etc.		
Control: _____		
<b>Other Hazards</b>	<input type="checkbox"/> Y	<input type="checkbox"/> N
Specify _____		
Control: _____		

**4. Work Within Established Controls**

<b>Are Hazards Covered in the Work Plan?</b>	<input type="checkbox"/> Y	<input type="checkbox"/> N
--	----------------------------	----------------------------

If not – notify supervisor/manager and change the plan.

**5. Feedback:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# What-if analyses are more creative than JHAs or checklists

What-If?	Result	Controls - in place or needed

1. Each question must start with “What if...?”
2. Everyone in the group pitches ideas
3. This is brainstorming, so no idea is criticized
4. Controls must be planned for uncovered hazards

# Section 5

# Worker Exposure Assessment



# **At the end of this module, you will be able to:**

- 1. List three questions to ask an industrial hygienist in the field about your potential exposures.**
- 2. Define exposure assessment and when an overexposure condition exists.**



# DOE measures a broad range of hazards at worksites



**Vapors from tank farm,  
Hanford**



**Temperature and  
humidity in Plant 6,  
Hanford**



**Gases from confined space**

# Sampling for particulate requires pulling air through a filter that gets sent to a lab

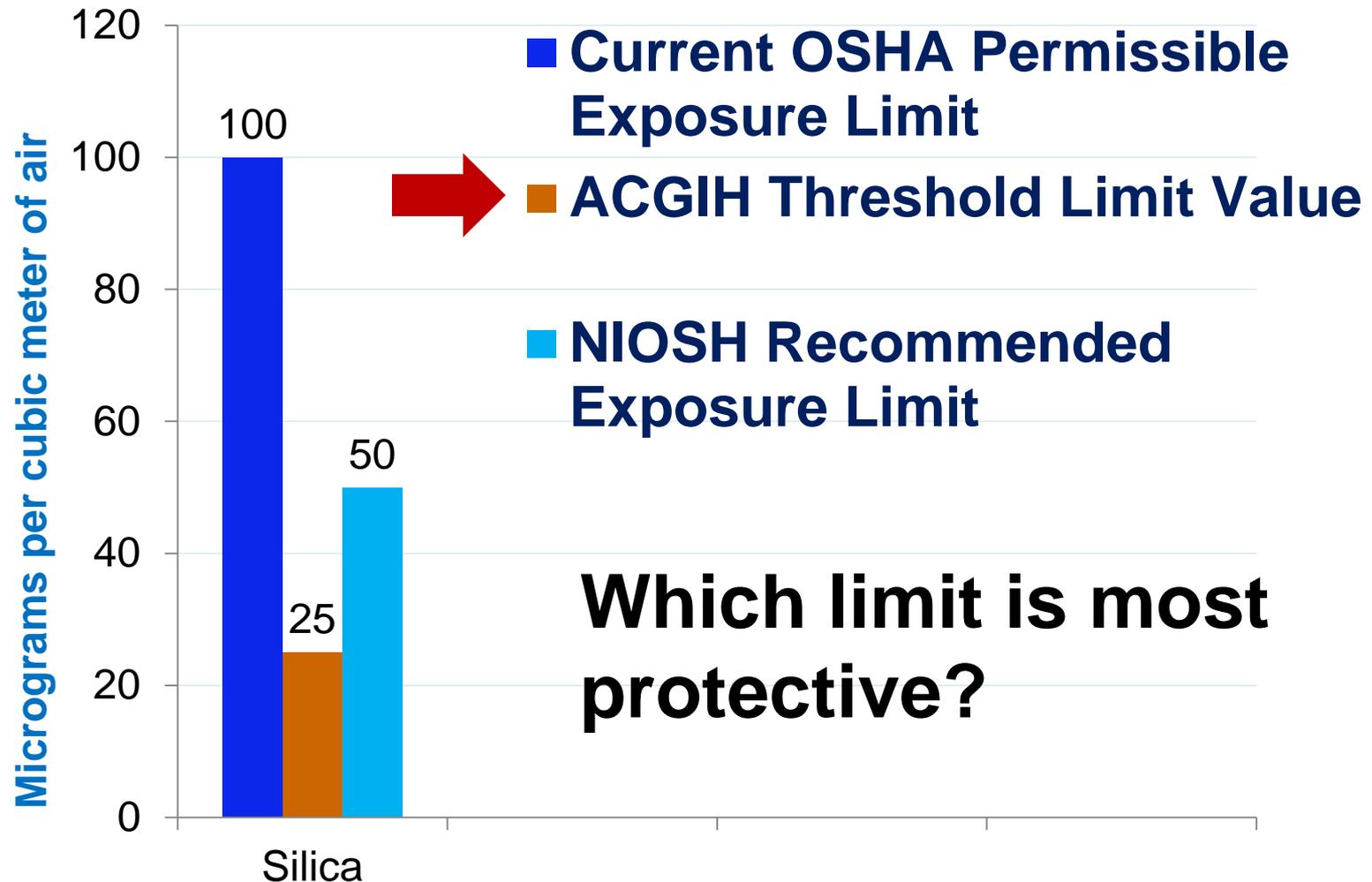


Air

cassettes  
holding  
filters

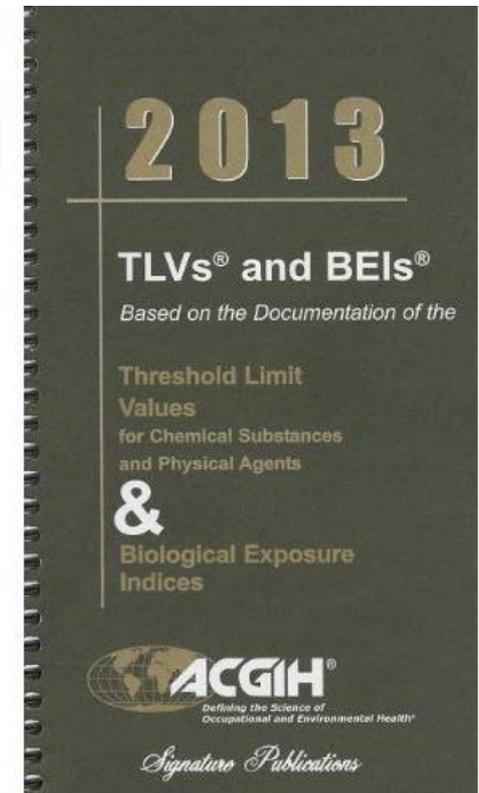


# Exposure limits vary for the same agent. Let's look at silica



# 10 CFR 851 requires that contractors comply with the 2005 ACGIH Threshold Limit Values when they are *more* protective than the OSHA PELs

**NOTE: Contractors can  
always use the *most*  
protective version of the  
TLVs in their Health and  
Safety Plans.**



# Section 6

# Communications



# **At the end of this section, you will be able to:**

- 1. Explain workers rights concerning Stop Work procedures under 851**
- 2. Explain how you would institute Stop Work procedures**
- 3. Describe the procedure to communicate your concerns under 851**

# Communication with labor organizations is also required!

## 851.11(d)

1. Unions must be given timely notice of development, implementation and changes to WSHP
2. Unions must be able to bargain concerning implementation of the plan



# DOE stop work procedures example from Hanford requires:

1. Stop work
2. Secure work and notify
3. Resolve issues
4. Remove stop work



**If conditions are hazardous  
and not properly controlled,  
you can:**



**Refuse the  
Assignment**

**OR**

**Stop  
Work**

# What are the conditions for refusing work?

1. A reasonable belief that the task poses an imminent risk of death or serious physical harm; and
2. A reasonable belief that there is insufficient time to seek effective redress through normal hazard reporting and abatement procedures

Who can put that into English?



# What are the conditions for stopping work?

**“Stop work authority must be exercised in a justifiable and responsible manner in accordance with procedures established in the approved worker safety and health program.”**



# **Workers can stop work when they discover imminently dangerous conditions**

- A situation places them, coworkers, contracted personnel, or the public at risk or in danger**
- A situation could adversely affect the safe operation or cause damage to the facility**
- A situation could result in a release of radiation or chemicals to the environment above regulatory limits**
- To clarify work instructions or propose additional controls**

# **Workers then must:**

**Ensure the work is in a safe condition and immediately notify supervisors or management and affected workers when you stop work or decline to perform an activity.**

**Employers then must resolve any issues that have resulted in an employee stopping work or an activity**

- Individuals who initiated Stop Work or their safety representatives must be involved**
- Corrective or compensatory actions are taken before resuming activity**
- Process is documented**
- Senior management and DOE Facility Representative are notified**

**If a Stop Work has not been resolved to the mutual agreement of manager and employee:**

- **Stop work remains in place**
- **Supervisor will notify appropriate parties**
- **Union safety and company management must resolve issues**
- **DOE Facility Rep must be notified of unresolved issues**

# Employers must promptly resolve issues resulting from an employee-raised Stop Work 10 CFR 851.20



**Safety inspectors investigating incident**

# Should YOU use Stop Work?

What's the reality in the Building Trades for "Troublemakers?"



What does  
“without  
reprisal” mean  
for Building  
Trades workers  
during “layoffs”  
and for  
re-hiring?



# How do I report an 851 issue?

## Company specific

- Contact your Supervisor or Manager
- Contact your company Employee Concerns Department

## DOE site-specific

- Contact your DOE Site Employee Concerns Department

## DOE HQ

- Go to the HSS website to review the regulation for your options  
<http://energy.gov/hss/office-health-safety-and-security>

## OSHA

- Contact your DOE Site Employee Concerns Department because OSHA will refer a caller to DOE.
- OSHA Regulations are administered by DOE for the contractors on their sites.

# Supplemental

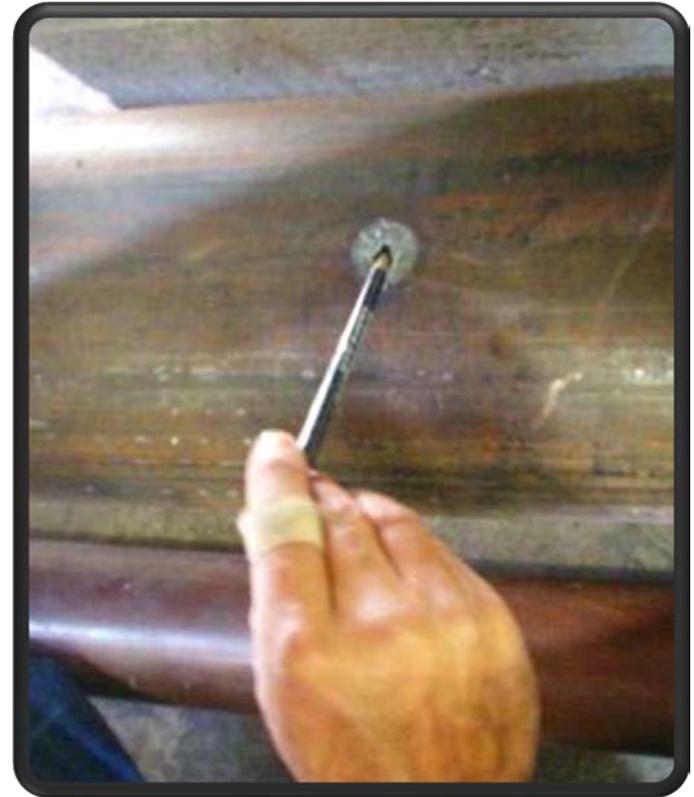
## **Business Agents & Managers Representing Members under 10 CFR 851**

# **At the end of this session, you will be able to:**

- 1. Answer questions from members about refusing a job assignment**
- 2. Answer questions from members about calling a “stop work”**
- 3. Advise a member about possible retaliation by employers**
- 4. Describe your role under 851**
- 5. Cite sources for your answers and advice**

# Case Study: Scenario #1

As a Business Agent or Manager, YOU are about to become involved in a job action at a DOE site.



**Read Scenario #1, answer the questions on the second page, and report your findings to the class.**



# Comments? Questions?



<http://www.cpwr.com>

301- 578-8500