NIEHS/DOE Nuclear Worker Training Program: Overview and Highlights

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Presentation Overview

• Program goals and history

• Training capabilities

• Training accomplishments

• Program activities

• Safety culture for workers
Program Goals and History
Providing High-Quality Training Since 1993

- Ensuring that DOE site workers are prepared to:
  - Work safely in hazardous environments
  - Identify hazardous situations
  - Take appropriate actions to protect themselves, fellow workers, and the environment
Program History: Defense Authorization


- Implemented through Interagency Agreement with DOE
  - Adapt existing NIEHS program to the DOE nuclear weapons complex.

- Supports worker safety and health training for DOE
  - Site clean-up activities
  - Waste management
  - Hazardous materials response
  - 10 CFR 851 compliance
## Program Awardees, 2015 – 2020

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>CPWR</td>
<td>CPWR - The Center for Construction Research and Training</td>
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<tr>
<td>IAFF</td>
<td>International Association of Firefighters</td>
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<tr>
<td>IBT</td>
<td>International Brotherhood of Teamsters</td>
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<td>ICWUC</td>
<td>International Chemical Workers Union Council Center for Worker Health and Safety Education</td>
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<tr>
<td>IUOE</td>
<td>International Union of Operating Engineers National Training Fund</td>
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<td>PETE</td>
<td>National Partnership for Environmental Training and Education/Community College Consortium for Health and Safety Training</td>
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<tr>
<td>USW TMC</td>
<td>United Steelworkers Tony Mazzochi Center</td>
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Training Capabilities
Grantees Provide Site-Specific and Trade-Specific Training

• A combination of nuclear, industrial, demolition, and construction activities

• Core training with reciprocity, or include site- and hazard-specific content

• Available to a wide variety of occupations
**Broad Range of Training Courses**

**Examples:**

<table>
<thead>
<tr>
<th>Site Worker</th>
<th>Em. Response</th>
<th>Radiation</th>
<th>Lead Abatement</th>
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</thead>
<tbody>
<tr>
<td>- Basic Superfund site worker</td>
<td>- Em. Response and HAZMAT technician</td>
<td>- Radiation protection worker/basic</td>
<td>- Lead abatement worker basic</td>
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<tr>
<td>- Superfund Bridge training</td>
<td>- Hospital emergency room ops</td>
<td>- Radiation worker II training</td>
<td>- Lead awareness</td>
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<tr>
<td>- Site supervisor refresher</td>
<td>- CAMEO (Computer-Aided Mgmt of Em. Ops)</td>
<td>- Radiation worker refresher</td>
<td>- Lead abatement worker refresher</td>
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<tr>
<td>- Hazard communication</td>
<td>- HazMat Transporter</td>
<td>- Lead abatement worker refresher</td>
<td>- Lead abatement supervisor ref.</td>
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Broad Range of Training Courses (Cont’d)

**RCRA/Industrial**
- RCRA TSD Site Worker
- Process Safety Management

**Asbestos Abatement**
- Asbestos abatement worker and supervisor
- Asbestos abatement supervisor
- Asbestos inspector certification

**Other Courses**
- Adult CPR
- Confined space
- Crane operations
- Fall protection
- Fire watch
- Flagger
- Forklift operator
- General construction safety
- General industry safety
- Load securement
- Lockout/Tagout
- Microbial remediation (mold and mildew)
- Respiratory protection
- Rigging and signaling
- Trench protection
Additional Notes on NIEHS/DOE Training Capabilities

- Grants are not restricted to represented labor; managers, unrepresented workers, and potential DOE workers can be included.

- Program encourages use of reciprocity.
Training Accomplishments
Sept. 1, 2016 – Aug. 31, 2017
From September 1, 2016 to August 31, 2017

- **Courses Provided**: 2,066
- **Workers Trained**: 32,202
- **Contact Hours**: 389,768
- **Dollars Awarded**: $8,852,400

**Overall Cost Per Contact Hour**

*22.71

*Cost per contact hour is calculated by Dollars Awarded/Contact Hours
Top Courses, Contact Hours, and Workers Trained

Of the 32,202 workers trained, the highest numbers were in Site Worker Refresher and Respiratory Protection courses.

Of the 389,786 contact hours, the highest numbers were in Site Worker Refresher and Site Worker courses.

Reflects training data from Sept. 1, 2016 – Aug. 31, 2017
Number of Workers Trained by Site

- Hanford Site: 7,684 workers
- Oak Ridge Field Office: 4,250 workers
- Savannah River Site: 2,752 workers
- Los Alamos National Laboratory: 1,801 workers
- Argonne East: 1,472 workers
- Portsmouth Gaseous Diffusion Plant: 1,219 workers
- Paducah Gaseous Diffusion Plant: 1,155 workers
- Nevada Test Site: 1,036 workers
- Fermi National Accelerator Laboratory: 1,018 workers
- Pantex Plant: 1,013 workers
- Idaho National Engineering Laboratory: 873 workers
- Weldon Springs: 832 workers
- Santa Susana Field Laboratory: 831 workers
- Other DOE Sites (n=27): 5,095 workers
- Multiple DOE sites: 726 workers
- Non-DOE Sites: 445 workers

32,202 workers trained at or around 40 DOE sites

Highest number of workers trained were at the Hanford Site, followed by the Oak Ridge, Savannah River, and Los Alamos sites.

Reflects training data from Sept. 1, 2016 – Aug. 31, 2017
Hanford Site - Number of Contact Hours per Course, 2017 Program Year

Site Worker Refresher: 29,040 hours
Respiratory Protection: 25,810 hours
Basic Superfund Site Worker: 17,720 hours
RCRA TSD Site Worker: 3,216 hours
Superfund Bridge Training: 1,280 hours
Trench Protection Principles of Pipe Laying: 552 hours
Confined Space: 400 hours
General Construction Safety: 260 hours
Training Methods/Trainer Development: 240 hours
Load Securement: 200 hours
Asbestos Abatement Worker Refresher: 80 hours
Scaffold: 72 hours
Asbestos Abatement Supervisor Refresher: 16 hours
Site Supervisor Refresher: 8 hours

Five grantees trained at the Hanford Site/HAMMER in the 2017 program year:
- CPWR, IBT, ICWUC, IUOE, and USW TMC

Reflects training data from Sept. 1, 2016 – Aug. 31, 2017
Four sites with the highest number of workers trained

**Hanford Site**
- Site worker refresher (3,630)
- Respiratory protection (3,227)
- Basic Superfund site worker (443)
- RCRA TSD site worker (134)

**Oak Ridge Field Office**
- Site worker refresher (2,284)
- Radiation worker II training (601)
- Basic Superfund site worker (226)
- Asbestos abatement worker (225)

**Savannah River Site**
- Emergency response for specific hazards (1,500)
- General construction safety (311)
- Fire watch (220)
- Asbestos abatement supervisor refresher (196)

**Los Alamos National Lab**
- Site worker refresher (1,061)
- Basic Superfund site worker (127)
- Confined space (264)
- Fall protection (118)

*Reflects training data from Sept. 1, 2016 – Aug. 31, 2017*
Grantee Activity Highlight: Community Connections and “Fenceline” Trainings

- **Washington State:**
  - USW TMC worked with the Tribal Employment Rights Office (TERO) of the Yakama Nation to provide a Train-the-Trainer in General Industry (OSHA 511/501 track) for tribal members.
  - The Yakama OSHA General Industry authorized are conducting OSHA classes through the winter and spring.

- **Other sites highlighted in annual report:**
  - **Ohio:** Radiological Control Technician (RCT) course offered by United Steelworkers (USW) Local 1-689 in Piketon, Ohio in reaction to a shortage of RCTs to do cleanup work at Portsmouth.
  - **Texas:** PETE/Amarillo College partnership for Pantex Plant training expanded; hazardous-materials training traditionally reserved for DOE workers now open to area industries.
Program Activities
NIEHS WTP/DOE: 2016-2017 Activity Highlights

- National Clearinghouse for Worker Safety and Health Training
  - Grantee, NIEHS, and meeting support
  - Worker Training Program Weekly e-Newsbrief
  - Began work on Economic Impact Study
- Safety Culture presentation at the May 2017 SCIP meeting
- DOE Training Working Group membership
- Presentation at the DOE and DOE Contractors Industrial Hygiene Meeting
Past and Upcoming DOE Trainers’ Exchanges

May 7-8, 2012
Knoxville, TN

March 3-4, 2015
Richland, WA

June 7-8, 2016
Albuquerque, NM

May 9-11, 2018
Phoenix, AZ
Who are the NIEHS grantee contacts?

Who can provide certain courses under the NIEHS grant?

Which grantees train at which DOE sites?

Connecting EFCOG to NIEHS Grantees Across the Complex
Safety Culture for Workers
Integrated Safety Management System and Safety Culture Initiatives

- NIEHS involved in safety culture discussions regarding DOE and broader for several years
  - 2013 NIEHS WTP Workshop Report: Examining Safety Culture/Climate
  - Ongoing priority to address safety culture from frontline worker perspective

- 2017 white paper with recommendations and comments on improving safety culture across the complex.
  - Clearinghouse worked with Mark Griffon to review safety and health policies and practices at DOE and how they have impacted safety culture
NIEHS Supplemental Grants on Safety Culture, 2016-2017 and 2017-2018

• CPWR
  – Tailoring existing Foundations for Safety Leadership training to DOE
  – Pilot trainings in 2 DOE Sites: Oak Ridge, TN and Hanford, WA

• International Association of Firefighters
  – Expanding and enhancing Frontline Safety program presented at 2016 DOE Trainers Exchange
  – Tailoring to include DOE-specific case studies and incidents
  – Pilots at WIPP and Oak Ridge; Train-the-Trainer in May
New Success Story!

Summary of WTP grantee work with Native Americans and Alaska Natives

DOE-related highlights include:

• USW training with Yakama Nation

• IUOE training with Spokane Indian Tribe

More Information

NIEHS/DOE Nuclear Worker Training Program


Includes:

• Annual Report and List of grantees

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