



National Institute of
Environmental Health Sciences
Worker Training Program

WTP GRANTEE MEETING

April 30, 2024 | Hyatt Regency Crystal City, Arlington, Virginia

Sharon D. Beard

Director, Worker Training Program



National Institute of
Environmental Health Sciences
Worker Training Program

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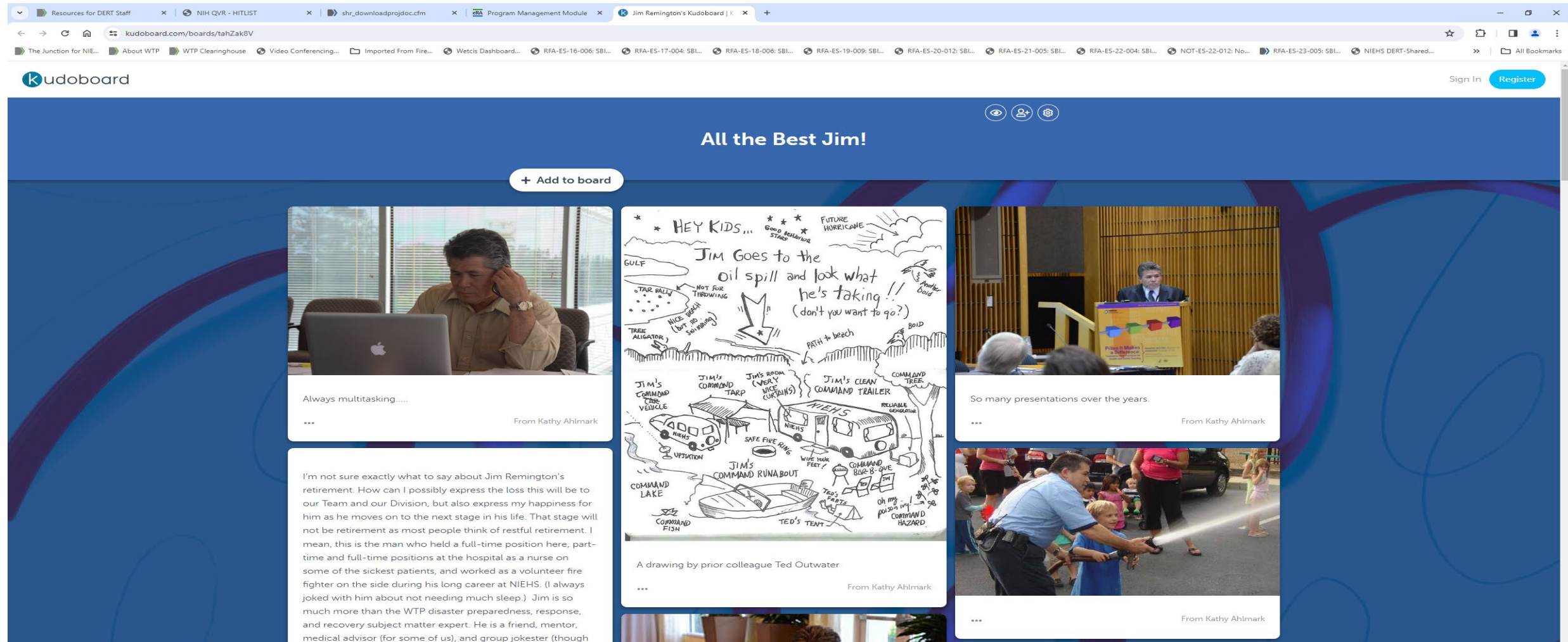
WTP Staff Updates

Superfund Budget Update

Overall Program Stats

HWWTP Update and Success Story

<https://www.kudoboard.com/boards/tahZak8V>



Program Officer Changes

- Kathy is now the Program Officer for Nova Southeastern University's U45 grant. Kathy will continue as Program Officer for all SBIR grants except for Cell Podium, which has been reassigned to Eric.
- The rest of Jim's U45 and UH4 grants have been reassigned to Sharon in the interim.
- Eric will be reviewing many of the U45 RPPRs for Sharon with Kathy as a back up, and Gary will be reviewing the UH4 RPPRs for Sharon.
- Please be patient with us as we are significantly understaffed and are working to get through this year.



2024 Superfund Budget Update

- **FY2024 Budget- Received a 4% Cut in Superfund budget late in the year**
 - Reviewing RPPRs, Spenddown, Unobligated budgets to make determinations regarding funding
- DOE Budget has not changed - \$10 Million.
 - Working on Memorandum of Understanding with DOE EM for next 5 years
- **FY2024 and FY2025 Congressional Justifications for the Superfund Program**
 - FY2024 -
https://www.niehs.nih.gov/sites/default/files/about/congress/justification/2024/2024_supfund_508.pdf
 - FY2025 -
https://www.niehs.nih.gov/sites/default/files/about/congress/justification/2025/2025_supfund_508.pdf

NIEHS Worker Training Program (WTP)



Worker safety and health

Delivering training to keep workers, worksites, and communities safer.



Disaster preparedness and response

Responding to disasters and emergencies, such as wildfires, hurricanes, and infectious diseases.



Workforce development

Empowering individuals in disadvantaged communities with new skills and careers.



Technology and training tools

Developing innovative technologies to use for worker health and safety training.

WTP also trains workers at U.S. Department of Energy (DOE) sites (separate from Superfund appropriations)

WTP Program Metrics To Date (1986-present)- All Programs



280,000+ courses



5 million workers trained



50 million+ contact hours



NIEHS HWWTP

**36-year Training Summary and
for the Budget Period
Aug. 1, 1987 – July 31, 2023**

Hazardous Waster Worker Training Program 2023 Training Year

Courses	Workers	Contact Hours
7,775	129,277	1,073,916

Year	Total Courses	Total Workers	Total Contact Hours
1988-1998	38,482	730,015	11,415,057
1999	3,981	74,013	956,251
2000	4,124	75,155	984,350
2001	4,806	79,710	1,031,394
2002	5,298	93,996	1,098,503
2003	5,586	95,265	1,132,682
2004	7,054	124,127	1,222,333
2005	7,663	130,837	1,211,824
2006	6,696	111,872	1,159,651
2007	7,848	131,037	1,425,059
2008	8,115	140,126	1,385,505
2009	8,308	149,488	1,458,660
2010	9,075	172,308	1,552,429
2011	7,775	134,539	1,306,807
2012	8,444	137,358	1,348,264
2013	8,607	142,141	1,407,102
2014	9,561	161,958	1,407,558
2015	9,300	164,346	1,434,561
2016	7,449	121,379	1,112,322
2017	7,382	112,622	1,057,864
2018	7,979	134,641	1,078,783
2019	7,697	121,647	1,131,218
2020	6,489	113,752	834,650
2021	7,113	106,670	715,013
2022	7,101	113,224	874,641
2023	7,775	129,277	1,073,916
Total	219,708	3,801,503	40,816,397

NIEHS NATIONAL ADVISORY ENVIRONMENTAL HEALTH SCIENCES COUNCIL –June 4, 2024

- HWWTP Success Stories:
 - PETE: Training for Veterans and their Families by Barton Community College, an OSHA Ed Center in Kansas, which also serves Fort Riley, Kansas.
 - Barton offered two 40-Hour Hazwoper courses in FY'24 at three bases: Fort Riley, Fort Carson and Fort Sill.
 - Other bases were reached by Zoom-by students from 29 states, Germany, Japan, South Korea and Puerto Rico.
 - 32 classes for 750 military program students for 12,454 contact hours of training

DEPARTMENT OF HEALTH AND HUMAN SERVICES NATIONAL INSTITUTES OF
HEALTH
NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES
ONE HUNDRED SEVENTY- SECOND MEETING OF THE NATIONAL ADVISORY
ENVIRONMENTAL HEALTH SCIENCES COUNCIL
June 4, 2024

BUILDING 101, RODBELL AUDITORIUM
NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES
RESEARCH TRIANGLE PARK, NORTH CAROLINA
VIRTUAL VIEWING ONLY WILL BE AVAILABLE AT:
<https://www.niehs.nih.gov/news/webcasts>

AGENDA

9:00 a.m.		BEGIN OPEN SESSION	
	I.	Call to Order and Opening Remarks	Dr. Rick Woychik
	II.	Review of Confidentiality and Conflict of Interest	Dr. David Balshaw
	III.	Consideration of February 2024 Meeting Minutes	Dr. David Balshaw
9:15 a.m.	IV.	DTT work in U.S. Veteran Populations	Dr. Warren Casey
10:00 a.m.	V.	VA program on toxic exposure from active duty	Dr. Karen Block
10:45 a.m.	VI.	Workforce Credentialing Program for Veterans and their Families	Mr. William Nash & Mr. Kirk Laflin
11:30 a.m.	VII.	Lunch Break	



Eric Persaud, DrPH

Health Specialist

Worker Training Program

Division of Extramural Research & Training

National Institute of Environmental Health Sciences

HAZMAT Disaster Preparedness Training (HDPTP)



Established in 2005

Response to lessons learned from national disasters, including Sept. 11 terrorist attacks.

Program supports the development and delivery of disaster-specific training to prepare workers to response to disasters.

From man-made disasters, natural disasters, and infectious disease events.

Course Delivery - 2023

 Courses delivered 911

 Workers trained 29,933

 Contact hours 298,817

For 2023-2024 as of April 1st:

- Top courses with workers trained:
 - Emergency Response Awareness (2,269)
 - Basic Operations (6,356)
 - Heat Illness Prevention (1,294)
 - Community Level Infectious Disease Awareness (855)



Photo courtesy of UT: CHWs provide customized educational materials to local businesses in El Paso

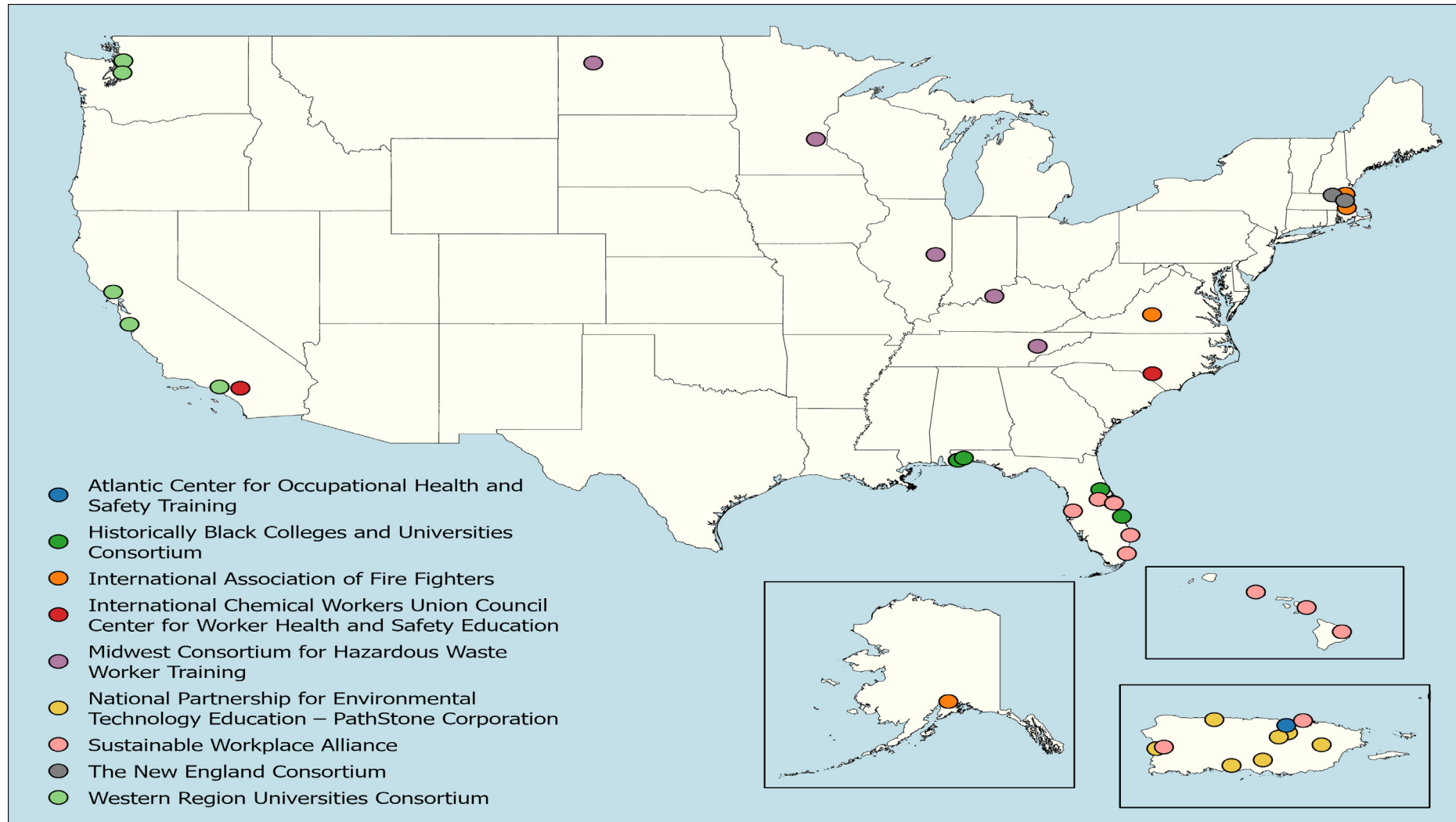
Case Study: Western Region University Consortium

- Multi-region Disaster Response Hub to build capacity of worker organizations
 - Hub partners supported Spanish-speaking workers responding to California storms
- Provided training for disaster preparedness for Spanish-speaking health promotoras
- Community Emergency Response Training
- Provided emergency response training to volunteer EMTs and firefighters in rural Whatcom County and in Snoqualmie, Washington
- Supported training and assistance to tribal emergency responders across the U.S. Northwest and Alaska, and to migrant disaster workers in California
 - Consolidated Appropriations Act of 2023



Whatcom County and Snoqualmie Fire and Rescue Fire and EMT training

Consolidation Appropriation Act, 2023: Promoting Health, Safety, and Recovery Training following Declared Disasters in 2022



Partnerships: A Critical Component



Sustainable Workplace Alliance has partnered with University of Florida's Training, Research and Education for Environmental Occupations training center to provide asbestos operations and maintenance Train-the-Trainer Courses

Regional stakeholder meetings have been held and are being planned and attendance is welcome to foster partnerships



Heat Illness Prevention

Grant Recipient example

LOSH released a series of four short video clips with heat illness prevention messages in six indigenous languages

<https://losh.ucla.edu/protecting-workers-from-extreme-heat/>

WTP and Clearinghouse

Recognized need for heat illness prevention tool

Working to identify and develop such a tool

Conducted a robust literature review

Holding stakeholder meetings

Plan to roll-out heat illness prevention tool this year



Photo: Teamsters. *Heat Injury and Illness Prevention training*



National Institute of Environmental Health Sciences
Your Environment. Your Health.

Environmental Career Worker Training Program

New York District Council of Carpenters Training Center

A few times a year, the carpenters send a group of 3rd year apprentices for a training and enrichment program held at the Carpenters International Training Center.

8 ECWTP alumni attend the training, including Shtira

Shtira completed the pre-apprenticeship in 2022.

She was referred to the program by Non-Traditional Employment for Women.

Prior to joining she was receiving Medicaid and SNAP benefits and living in Public Housing.

She is now earning about \$35 an hour



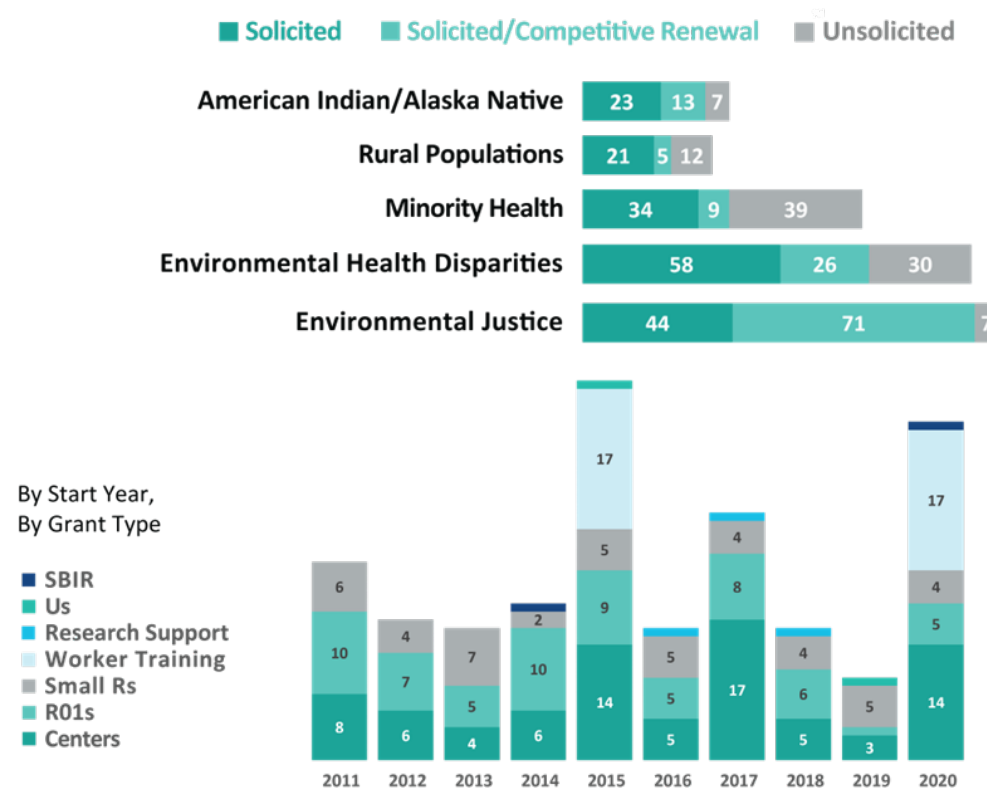
Justice40 Initiative and Whole-of-Government Approach

Justice40 aims to deliver 40% of the overall benefits from federal investments in workforce development and other areas to disadvantaged communities

ECWTP was one of 21 pilot programs in 2022.

ECWTP framework can be used to reflect on themes that other NIEHS grant programs can review and recognize in their own projects.

NIEHS can use the ECWTP framework to review grant portfolios that highlight and encourage these opportunities and activities nationwide.



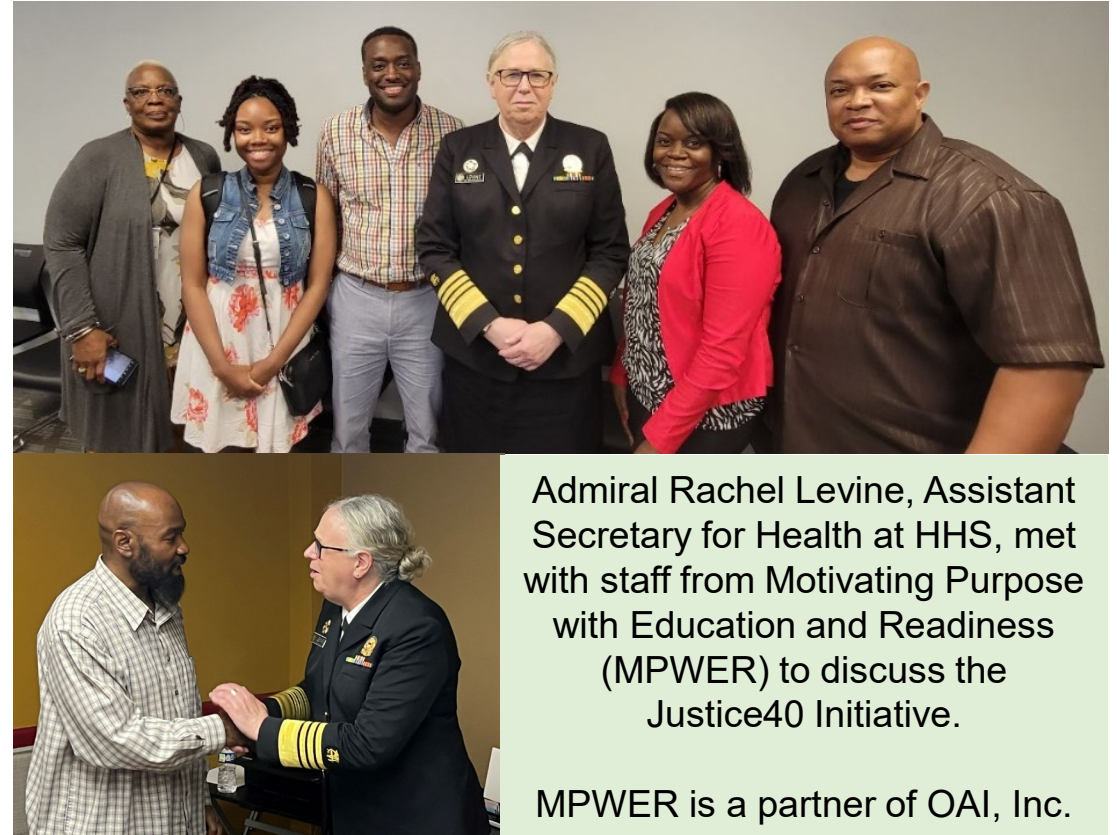
Building Careers, Transforming Lives, and Advancing EJ

Justice40 initiative helped develop partnership between OAI and MPWER.

MPWER is a nonprofit that utilizes community engagement and therapeutic best practices

Admiral Levine highlighted the impact of the ECWTP,

“The Worker Training Program is a great model that can help support our economic future. Trainees learn skills that can lead to good paying jobs, and they get the type of support and services they might need to help them handle the pressures of life more effectively.”



Admiral Rachel Levine, Assistant Secretary for Health at HHS, met with staff from Motivating Purpose with Education and Readiness (MPWER) to discuss the Justice40 Initiative.

MPWER is a partner of OAI, Inc.

ECWTP Impact Evaluation (2014 to 2022): Economic Findings



The figure shows the **approximate monetary (direct) benefits** to the economy that arose from the ECWTP's interventions. The cumulative value added over the study's duration (2014 to 2022) was calculated by summing the program's estimated direct benefits.

The ECWTP returns approximately **28X** the amount invested by the federal government back into the economy.

Future Directions

Track activities and support partnerships and actions

Reporting on declared disaster and overall disaster preparedness efforts

Roll-out supportive tools, for example on heat illness prevention

Continue to highlight success stories

Support to identified training topic issues

Publish ECWTP Impact Evaluation





Kathy Ahlmark

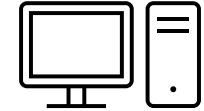
Health Specialist

Worker Training Program

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WTP Data Management System (DMS)



- DMS moving from ColdFusion to a new platform.
- Parts of the DMS to be redesigned. We want your input!
- Upcoming series of Zoom meetings to gather your input on the way the DMS works, what you like, what you would like to change, and what you might like added.
- The first Zoom meeting will be on completing and uploading progress reports.
- All meetings will be recorded so that people who could not attend will be able to listen.
- Everyone is welcome to send us ideas and comments.
- Meeting information will be distributed via the DMS-Users listserv.

SBIR E-Learning for HAZMAT Program

Develops e-Learning health and safety training products in a variety of formats to assist both students and instructors in the training and education process.

89	Grants supported since 1997
4	Current grantees
\$699,212	Funding dollars in FY23

- Design innovative technologies
- Enhance worker training in disasters and emergencies
- Receive patents and awards
- Commercialize products for broader use



SBIR E-Learning for HAZMAT Program:
niehs.nih.gov/careers/hazmat/training_program_areas/att/index.cfm

Current WTP SBIRs



Cesar Bandera – Cell Podium, LLC

Team-Based Virtual Field Exercises for HAZMAT Training



Jeffery McLaughlin – Radiant Creative Group, LLC

Agile Development of Innovative, Interactive Hazard Recognition and Mitigation Tools/Learning e-platforms for Workers Involved in Disaster Rescue and Recovery



Ernest Vincent Cross – Charles River Analytics, Inc.

IMPRINT Confined Spaces



Shay Steel – Medcognition, Inc.

Enabling Realistic HAZMAT Training Simulations with the PerSim* Augmented Reality Patient Simulator: Phase II



New FY24 SBIR Grant To Be Announced



New FY24 SBIR Grant To Be Announced

NIEHS WTP SBIR E-Learning for HAZMAT Program Fact Sheet

- Impacted worker training in various occupational sectors.
- Provided opportunities for commercialization and patents.
- Facilitated partnerships among small businesses that develop technologies and WTP consortiums that deliver training.



Program Overview

The National Institute of Environmental Health Sciences (NIEHS) Small Business Innovation Research (SBIR) E-Learning for Hazardous Materials (HAZMAT) Program funds small businesses, or grantees, to develop innovative applications or technologies that are used for health and safety training.

These technologies aid in the mission of the broader NIEHS Worker Training Program (WTP) – to prevent work-related harm by providing training for emergency responders, skilled support personnel, and workers involved in the cleanup, removal, or containment of hazardous materials.

This fact sheet describes how the NIEHS SBIR E-Learning for HAZMAT Program has:

- Impacted worker training in various occupational sectors.
- Provided opportunities for commercialization and patents.
- Facilitated partnerships among small businesses that develop technologies and WTP consortiums that deliver training.

Technology Enhances Worker Training

Proper training can mean the difference between life and death for workers who handle hazardous materials or respond to manmade or natural disasters. Although training for such workers has traditionally taken place in physical classrooms, recent technological advances have facilitated more accessible and interactive training through electronic platforms. Technology-enhanced training products can help workers safely assess, respond to, and protect themselves and others from harmful exposures on the job.

In 1997, WTP began conversations to establish an electronic learning (e-learning), or technology-enhanced training products, initiative. These conversations led to the development of a formal e-learning guidance document and the beginning of the NIEHS SBIR E-Learning for HAZMAT Program (SBIR HAZMAT).

In 2001, WTP examined the technological divide for workers in diverse sectors, as well as protocols to aid in knowledge transfer through blended learning techniques. These blended learning techniques include the delivery of training content through a variety of combined methods, such as face-to-face classroom instruction and digital instruction through online, mobile, or virtual activities. WTP has since adopted many best practices in using technology for HAZMAT training.

At the turn of the 21st century, the worker training community witnessed a technology revolution that would enable workers in high-risk environments to better prepare for hazardous incidents and emergencies. SBIR HAZMAT grantees demonstrate a commitment to technological innovation and dedication to improving worker health and safety.

Benefits of Innovative Products and Technologies

SBIR HAZMAT grantees are encouraged to partner with WTP-funded organizations that deliver health and safety training across various program areas – from hazardous waste, to nuclear weapons sites, to disasters, and more. Grantees have revolutionized methods to deliver training to workers through the development and use of online and web-based learning, mobile applications, video games, virtual reality, and immersive learning systems.

Many grantees have developed mobile applications that allow accessibility to health and safety information in areas with limited Internet connection. Others have developed learning management systems that store training modules that can



Gary Johnson

Industrial Hygienist

Worker Training Program

Division of Extramural Research & Training

National Institute of Environmental Health Sciences



DOE Meetings – SAVE THE DATES

ASSP Denver, CO, August 7, DOE Office of Worker Safety and Health Policy

EFCOG GROUPS

Training EFCOG Annual Meeting 2025

EFCOG March 19 – 21, 2024

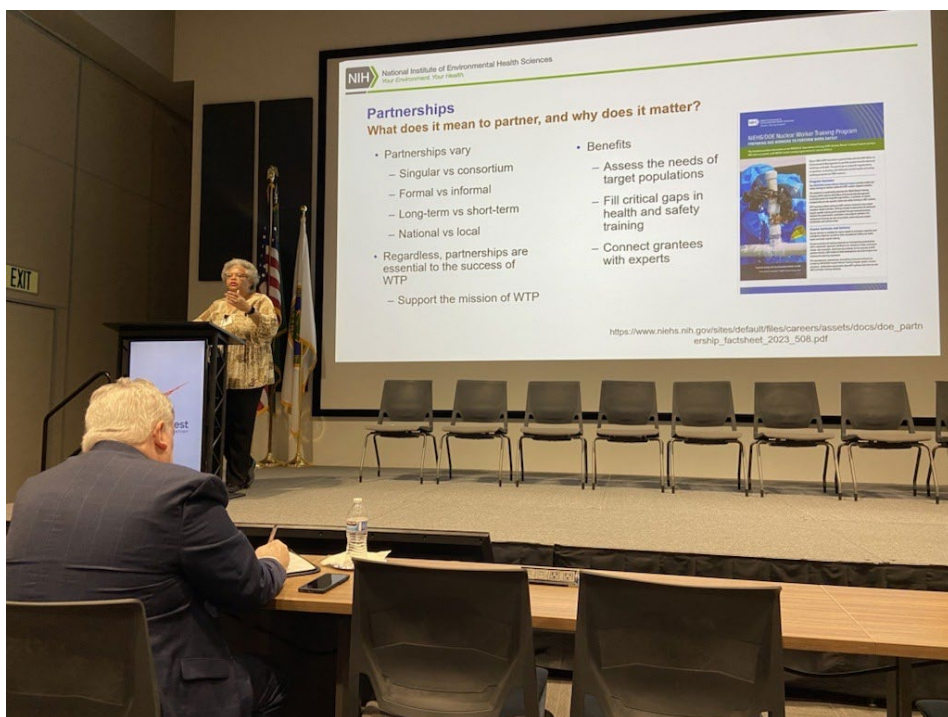
Three grant recipients presented:

- United Steelworkers Tony Mazzocchi Center (USW)
- CPWR-The Center for Construction Research and Training, and
- The Partnership for Environmental Technology Education

Presentations covered:

- WTP's workforce development and trainer-preparation efforts
- How WTP grant recipients have improved workers' knowledge of hazards and enhanced their safety mindset, and
- How DOE site managers can access free trainings and support from the WTP grant recipients

EFCOG March 19 – 21, 2024



Sharon Beard presenting on the importance of partnerships



HAMMER representatives sharing about successful partnerships with WTP

EFCOG March 19 – 21, 2024



Participants at the annual Energy Facility Contractors Group's Training Working Group meeting gather in front of the Volpentest HAMMER Federal Training Center in Richland, Washington (Photo courtesy of WTP)



Recent DOE Grantee Highlight

United Steel Workers Charitable Trust

USWTMC Partners With Tribes to Deliver Training

- Recently, the USWTMC partnered with the **Tribal Employment Rights Office** to launch a pilot program focused on Tribal members.
- USWTMC is delivering Junior Radiological Control Technician (JRT) training to the **Umatilla, Yakima, and Nez Perce Tribes**. The **240-hour JRT training program** emphasizes recruiting Tribal individuals, including Tribal youth, mentors, and health and safety trainers.



Photo courtesy of USWTMC

NIEHS/DOE Nuclear Worker Training Program

30-year Training Summary for the Budget Period Sept. 1, 1993 – Aug. 31, 2023

Year	Total Courses	Total Workers	Total Contact Hours
1994-2004	14,769	199,325	2,834,957
2005	1,961	25,442	329,840
2006	2,044	26,365	325,533
2007	2,283	34,074	400,491
2008	2,225	33,702	414,746
2009	2,265	36,266	530,271
2010	2,188	35,329	523,287
2011	1,987	31,238	405,556
2012	1,963	29,842	365,083
2013	1,790	27,737	309,977
2014	1,900	28,334	311,412
2015	1,830	26,396	323,316
2016	1,927	28,162	368,680
2017	2,066	32,202	389,786
2018	1,679	27,769	343,923
2019	1,795	29,714	368,276
2020	1,387	19,572	214,129
2021	1,901	23,095	280,377
2022	1,890	26,163	327,619
2023	2,378	35,095	421,842
Total	52,228	755,822	9,789,101